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Is the New Deal Being Messed Up?

SINCE about the beginning of this year it has been increasingly apparent that the general public was getting uncertain about restoring prosperity by promoting scarcity. Experienced and thoughtful business men had had misgivings about this paradoxical program from its beginning. But, afflicted by their own depression troubles, and in the face of the ballyhoo support of NRA, they had got little hearing even when occasionally they had the temerity to voice their misgivings. Unthinking people had been swept along on the tide of booster propaganda. They were delighted with the idea of a national leadership daringly doing things, even if they were in doubt just what things it was doing. So for a time small attention was given to the experimental character of measures or to the failure to set up any definite goal at which these measures were aimed.

More recently searching questions have been demanding answers. Have the recovery activities produced results proportionate to either their cost or to the hopefulness with which their initiation was greeted? Two inquiries as to the recovery program are lately being pressed:

First, will it work?

Second, do its authors conceive it as an end in itself, or merely as the beginning of a sweeping project of social reconstruction?

THE first question is being answered with less and less confidence even by those who most wish the answer to be affirmative. The second is asked with more and more misgiving by a constantly increasing number of people.

Not since 1896 has there been such interest in economic problems as there is today. People are reading more, thinking more, trying harder to put together the results of their reading, thinking and experience. And there is another possible parallel to 1896. A polling in August of that year would probably have swept the country for the program that in November was overwhelmingly beaten. Will the November of 1934 bring another testimony to the moderating influence of second thought?

THERE has been much discussion of whether the blue prints of our recovery plan were borrowed more from Italy or from Russia; and the answer has commonly been hesitant, because of doubt what the plan aims at. Being pretty sure that neither Britain nor Canada has tried anything savoring of either Fascism or Communism, people are comparing their recovery accomplishments with our own—rather to the disparagement of our program. Britain and Canada have clung to the old ideals—tightening the belt, balancing the budget, insisting that economic law has not yet been repealed, keeping the Government out of business, and pay-as-you-go. On the face of returns to date, they have apparently done quite well. Canada seems to have rather bettered our record in overcoming unemployment, while the British exchequer the other day reported a comfortable surplus in contrast to our vast deficit.

SMALL wonder, then, that the American community is beginning to inquire a little about the efficacy of our more spectacular proceedings. We have poured out billions to prime the pump, and yet there are Thomases who doubt whether anything is coming out of the spout except a small portion of the priming water. Still more wonder whether the supply of priming water will hold out.

Out of these doubts some things seem to be crystallizing in the public thought. There is less ready acceptance of Government in the role of a beneficent Providence able to ladle out magically accumulated funds for the deficits of business.

THERE is increasing reluctance to assume that politicians and political appointees are more competent to direct business than are the men who have given their lives to building it.

Price-fixing is being examined in the light of a hundred generations of experience, with the resultant conclusion that it works no better now than under the Roman emperors or the early Chinese dynasties.

Question marks are being written opposite proposals to feed people with wheat that other people are paid not to raise, or to clothe them with cotton that the planters are hired to plow under.

It begins to be recognized that instead of restricting production our need is to encourage it and then get its fruits consumed through wider distribution of buying power in better wages and more employment.

There has been a healthy protest against spreading employment by reducing working hours. The argument that consuming power has never yet had a chance to prove what it can do for a truly prosperous community, is getting a serious hearing.

THE original idea of the industrial codes was to provide more employment and better wages, and do away with child labor. These things would have brought higher prices, and then profits would take care of themselves. Unfortunately some people got the idea that the N.I.R.A. had repealed anti-trust laws, and undertook to chisel out monopolies for themselves. Some of them seriously believed that was what the recovery program wanted them to do; more of them simply saw the opportunity, and reached for it. Both groups were wrong. The anti-trust laws have not been repealed, and, plainly, are not going to be. Monopolies, whether established through the machinations of private business or under grants of Government privilege, are altogether bad; and the worst of them are those erected under color of Governmental approval. It makes no difference whether that approval is given through a royal charter or an NRA code.

THE sooner we get back to accepting the simple fundamentals to which the codes were originally dedicated—more employment, better wages, better distribution of buying and consuming power—the sooner will we be back in the way of prosperity. And there are encouraging signs that with sober second thought the country is getting its feet into the safer paths.

Temporary National Code Authority for the Trucking Industry

Left to right: Front Row—James E. Murphy (Contract Carrier), St. Paul Park, Minn.; J. Rowland Bibbins (National Recovery Administration); Ted V. Rodgers (Contract Carrier), Scranton, Pa., Chairman; Roy B. Thompson (Manager, Federated Truck Associations of California), San Francisco, Vice-Chairman; W. A. Gordon (Furniture Warehouseman), Omaha, Neb. Back row—Edward F. Loomis (Staff Secretary); Edward S. Brashears (Staff General Council); Fred O. Nelson (City Drayman), New York City; Percy F. Arnold (Contract and Common Carrier and City Drayman), Providence, R. I.; William E. Humphreys (Staff Treasurer); J. H. McAlphin (Not-for-Hire), Eldorado, Ark.; H. D. Horton (Common and Contract Carrier), Charlotte, N. C.; Frank C. Schmidt (Common Carrier), Toledo, Ohio. Charles P. Clarke (National Recovery Administration), is not in the picture. Neither are staff men C. F. Jackson and J. V. Lawrence.

The Trucking Code is Rolling Down the Home-Stretch

THE Trucking Code—the trucking industry's experiment in self-regulation which will cost millions upon millions of dollars—is, at last, coming down the home-stretch. All that remains is for NRA to approve the industry's plans for registering the 1,600,000 motor vehicles which will come under the code.

Approval will depend upon the outcome of the hearing into the reasonableness of assessments proposed by the National Code Authority for the trucking industry. This hearing was ordered by General Johnson, after the National Code Authority had approved an assessment of $3.00 per vehicle against all vehicles in the "for-hire" classification of the code, and 90 cents per vehicle against vehicles in the "not for hire" class. These assessments would furnish a budget somewhere around three million of dollars for administration of the code.

IT is difficult to see how the hearing into assessments can be anything but a formality. The writer has seen the stack of work-sheets containing an analysis of every conceivable item of expense which would be caused by the code. This assessment budget has been in preparation since last December. Budgets submitted by more than 20 states were taken into consideration in arriving at final results. Then different revisions were made of the budget to make certain that the work caused by the code would be done at the lowest possible cost.

IT isn't possible to list here all the items of expense figured into the 90-cent assessment. The cost of registration and of handling reports was analyzed from every angle. Some of the items covered by the assessment are:

Cost of registration insignia. (Insignia sample is reproduced in these pages.)

Freight and expressage on insignia to the distributing point in each state.

Printing and distributing the registration and report forms to the various states. (There is really only one large form which combines registration and operating data. And when the writer says large, he means a huge headache. He recalls that the tentative form he saw a few weeks ago consisted of six pages, each about half again as large as the page you are now reading, and much more closely printed. The original form was a simple one. Then came demands from NRA to procure operating data which would give the government its first accurate picture of the trucking industry. There is no doubt about the value and the necessity for these operating facts, but neither is there any doubt that a lot of operators will do considerable head-scratching, fuming, fussing and cussing before they come up with the answers.)

Cost of editing registration and report forms for tabulation.

Coding and tabulating of registration and report forms.

Filing and storage of registration and report forms.

Cost of maintaining registration offices located at points convenient to those who must register.

Postage on registration insignia from the state headquarters to the registrant.

Addressing registration insignia; their inventory, storage, insurance, etc.

Printing and shipping to state headquarters of registration certificates.

The filling in of registration certificates.

Addressing and mailing of registration certificates to each registrant.

THE assessment of $3.00 covers all of the items above and additional costs of code administration which would be applicable only to "for-hire"

How the Trucking Code Stands

1. **National Code Authority approved.**
2. **Effective date of code extended to March 30, 1934.**
3. **Break-down of nation into 12 regional areas approved.**
4. **Many State Code Authorities approved.**
5. **By-laws and regulations for State Code Authorities approved.**
6. **Hearing ordered on assessment fees of 90 cents per vehicle for not-for-hire vehicles and $3 per vehicle for for-hire vehicles.**
7. **Registration insignia approved.**
8. **Registration and report form approved.**

These are reproductions of the code registration plates that well-dressed trucks will wear

vehicles. Among these additional items are:

Securing compliance with the general administration of the Industrial Relations provisions of the code.

Providing facilities for the filing of rates and tariffs, and the administration of this article of the code.

Development of a cost formula on which rates and tariffs will be founded. Studies to determine the feasibility and desirability of a shorter working day in the industry.

Studies to develop standards of safety and health among employees of the industry.

Studies on which to base a report to the Administration as to the advisability of evidence of responsibility or insurance for public liability, property damage or cargo, which report is required in the code.

Development of trade agreements tending to liberalize labor conditions and to develop trade practices within natural or territorial groups of the industry.

Development of a system of uniform accounting and reporting to be recommended to the Administrator as required in the code.

IT can safely be said that the representatives of the trucking industry who worked up the assessments arrived at their figures only after the most painstaking effort. They had many conferences with various governmental departments, with other Code Authorities that have had experience in code administrative work, with private institutions and recognized experts who have had years of experience in gathering, tabulating and handling data of the sort that will be required under the trucking code. Every effort was made to get the assessments down to the lowest possible point.

It is this very fact that makes it reasonable to suppose that the assessment hearing is not likely to develop objections which would cause the budget to be thrown overboard at this stage of code work. An objection to be valid would have to represent almost as much analytical and research work as has gone into the making of the budget.

SO code effectiveness actually is now in the home-stretch. Last month at this time it was still in the backstretch but during the last 30 days Washington has seen a great deal of expert jockeying. As a result decisions have been made which were looked for months ago.

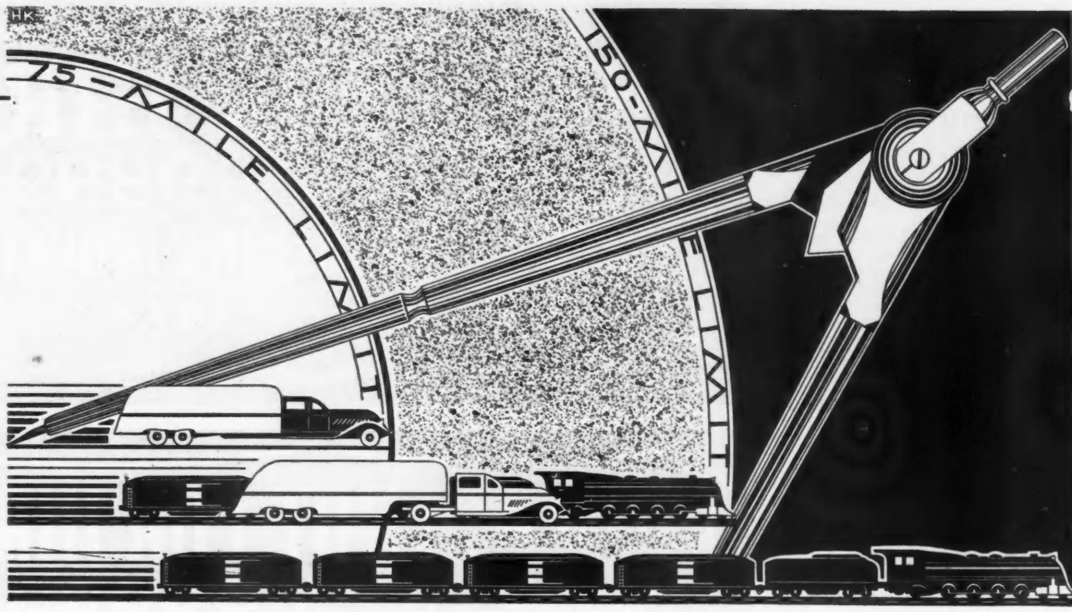
The signing of the trucking code by President Roosevelt last Feb. 10, was just the beginning of further troubles for those faithful representatives of the industry who have been making personal sacrifices to promote its welfare. Weeks went by and so did Feb. 25, the effective date of the code. But there was nothing that could be made effective because the machinery for setting the code in motion was dismantled, assembled, and dismantled time and again in undergoing the inspection of the various boards of NRA.

MEMBERS of the temporary National Code Authority were given official approval. These men shouldered the responsibility of trying to get the decisions by NRA which would give the industry what it had been looking for since December. Their patience was singularly rewarded when one of General Johnson's right-hand men raised the very original question of why the trucking code should include private carriers. Raising this question after the code had been approved by everybody from President Roosevelt down was a rather weighty straw but it didn't succeed in breaking the spirit of the National Code Authority.

Its members went to the mat and victory eventually was theirs. The NRA mogul who had raised the question had also (at least so the story goes) raised Cain with the various NRA "menials" who had worked on the trucking code. He wanted the code amended to stress the fact that if private carriers didn't want to register under the trucking code they could protest to NRA and it would be subject to hearing.

THE matter was settled just about the time the National Code Authority prevailed upon NRA to extend the effective date of the code 30 days —to March 25, that is. Both matters were covered in an executive order issued by General Johnson.

(TURN TO PAGE 15, PLEASE)



L.C.L. Traffic Report Aims To Put 150-Mile Limit on Trucks

FOR the first time in transportation history a searching analysis of the whole field of freight transported in lots of less-than-railroad-carload lots was minutely examined by a corps of transportation specialists under the guidance and direction of John R. Turney, an outstanding and forward-looking traffic executive, formerly vice-president of the St. Louis-Southwestern Railway, and, since the organization of the Federal Coordinator of Transportation Staff, the director of the Transportation Service Section.

The work of this organization has resulted in a proposed plan for the transportation of merchandise freight which is of primary importance to every motor truck operator because it proposes changes, which if adopted by the railroads and other carriers, would revolutionize the transportation of freight throughout the United States.

The merchandise report of the Section of Transportation Service has vital bearing upon the status and future development of the motor transportation industry. The nationwide study is based upon complete answers to detailed inquiries received from over 35,000 shippers and consignees of merchandise freight; all principal railroads, express companies, freight forwarders and water carriers engaged in domestic freight transportation, all truck operators operating fleets of 10 or more vehicles in intercity transportation as common carriers, contract carriers or private vehicle operators.

The studies indicate that a startling amount of intercity merchandise freight is being transported by motor vehicles. The total tonnage of merchandise freight, that is, freight in less-than-railroad-carload lots, transported by all domestic land transportation carriers amounted, in 1932, the year studied, to about 52,000,000 tons, distributed among transport agencies as follows:

Railroad L.C.L. Service	15,234,000
Freight forwarders	1,902,000
Express companies	2,826,000
Highway common carriers	3,549,000
Highway contract carriers	2,459,000
Highway private haulers	26,252,000
Total (Tons)	52,222,000

These figures are, of necessity, to be considered as approximations, for returns were not made by all transportation agencies, but they are significant in indicating the importance of highway transportation in the intercity movement of freight traffic. Highway vehicles transported over 32,000,000 tons of merchandise in 1932, as compared to less than 20,000,000 tons transported by railroad L.C.L., forwarder and railway express services.

The popularity of motor transportation is attested to by the fact that in 1932 the tonnage of merchandise freight transported by highway was more than twice the tonnage transported by rail L.C.L. service and that over half of the highway traffic moved for distances over 50 miles. This estimate, arrived at by dividing the total tonnage reported by shippers and receivers by two to allow for complete duplication, shows 14,763,000 tons transported by trucks for distances under 50 miles, 12,434,000 tons transported for distances of 50 to 250 miles, and 3,085,000 tons transported by highway over 250 miles.

The responses of 35,468 shippers, representing 112,142,038 tons of merchandise freight shipped or received, stated their reasons for using motor trucks as compared with other carriers'

IN this article are summarized those portions of the Federal Coordinator of Transportation's report on less-than-carload lot freight traffic which are of vital interest to the motor truck industry.

The analysis presented here is entirely impartial and, in this respect, resembles the voluminous report of the Coordinator's Section of Transportation Service.

Printed copies of the report will be available shortly. You can make arrangements to get a copy by communicating with the Federal Coordinator of Transportation, Washington, D. C.

JOHN R. TURNEY, Director of Section of Transportation Service

service as shown below. In most cases several reasons were assigned.

	% of Shippers	% of Tonnage
Simpler classification or rates	16	25
Cheaper packing	21	27
Store door collection	51	54
Store door delivery	65	67
Cheaper total service	53	67
Faster service	65	73
More flexible or convenient service	43	61
Late acceptance of shipments	21	26
Less damage to or loss of freight	11	14
Personal friendship or interest	3	3

With respect to speed, studies indicated the average door-to-door speeds to be over 20 miles per hour, while present rail L.C.L. schedules were found rarely to exceed 20 miles per hour, with door-to-door services still slower owing to terminal detention. The motor vehicle was found to be "generally superior in speed to rail express service for distances under 150 miles, but generally inferior for distances in excess of 350 miles."

The almost universal demand of modern industry for complete merchandise service, including store-door collection and delivery service, was found to be responsible in large measure for the growth of highway transportation. As shown, about 65 per cent of the shippers representing 67 per cent of the freight shipped, use motor transportation because of delivery service, while 51 per cent of the shippers speaking for 54 per cent of the freight transported stated that they use motor freight service because of the availability of store-door collection service.

The cheaper total cost of motor freight transportation is a drawing card of great importance. Over 18,000 shippers, 53 per cent of all who responded, representing 67 per cent of the merchandise freight, reported that they used motor freight transportation partly because of the lower total cost of motor transportation. The unfavorable position of railroad merchandise rates as compared with motor freight transportation charges was found to be due partly to:

1. Complex classifications of railroad freight.
2. Complicated tariffs of rates and charges.
3. Rigorous packing requirements.
4. Incomplete transportation service.
5. Lack of rate parity.
6. The rigidity and structure of the railroad system.

As a result of these factors, the level of railroad L.C.L. charges is higher than the highway transportation charges alternatively available to shippers and consignees of merchandise freight, with the result that the level of rail L.C.L. charges, as indicated by the third-class railroad freight rates, is higher than the highway freight rates for all hauls in the East under 280 miles, in the South for all hauls under 700 miles, in western trunk-line territory (the northwestern part of the United States) for all hauls under 500 miles, and in the Southwest for all hauls under 950 miles. Motor freight rates were found to be lower than the railway express rates for all distances.

Coupled with this fact is the further finding that "the present box car is inferior either to the motor vehicle or to rail express equipment in its ability to protect the lading against shocks, oscillation or vibration."

The effect of competition has been unfavorable financially to all forms of inland transportation, although not so damaging to motor carriers as a rule as to others, the studies revealed. The motor freight carrier has a simpler operating problem due to the smaller unit of equipment and the smaller number of routes covered.

Motor truck common carriers operating 10 or more vehicles were found to have earned in 1932 a return of slightly less than 2 per cent upon the capital investment after paying operating expenses and taxes, an operating ratio including taxes of about 99 per cent. Highway contract carriers were found to have an operating ratio including taxes of about 88 per cent. The average cost of operation of all highway freight transportation vehicles included in the survey, operated by common and contract and by private haulers, was found to be 21 cents per mile. The operating ratio including taxes of freight forwarders was found to be about 92 per cent. The average operation ratio of railroad less-than-carload merchandise freight transportation was found to be about 125 per cent, and the railway express ratio was found to be about 113 per cent.

In other words, railroad and express merchandise traffic failed to bear the full proportion of the total operating expenses and taxes in 1932 by \$6.04 per ton handled by express and \$4.13 per ton handled by rail L.C.L. service. The handling of rail merchandise traffic resulted in an out-of-pocket cost of about \$11.70 per ton, and the express service had an out-of-pocket cost of \$35.89 per ton. The services failed to bear their full share of total operating expenses by about \$80,000,000. This was found to be due largely to "the expense incurred in maintaining redundant rail organization, facilities and services, resulting in unnecessary duplications of station facilities, billing, platform handling, concentration and distribution, transfer enroute, and in a multiplicity of services and schedules."

The report recommends the integration of railroad express and forwarding merchandise traffic to eliminate preventable wastes in line and terminal costs in order to reduce the potential cost of rail merchandise transportation below the 1932 costs of motor truck transportation and to make the utilization of the proposed integrated rail L.C.L. service more economical than highway transportation for merchan-

dise traffic moving more than 100 miles.

"Assuming that the practices causing preventable wastes in the handling of merchandise transportation are eliminated, then highway transportation for distances over 150 miles would not be economically justified with motor vehicles operated at the average cost of their 1932 operations, and likewise concentration or distribution of merchandise in rail L.C.L. service for distances under 75 miles" would not be economically justified, even after the potential economies pointed out have been realized. Motor truck transportation for distances between 100 and 150 miles generally would be justified under these conditions only when the superiority in speed or flexibility of the vehicle is worth the additional cost of providing the service.

• *Comparative Costs*

The comparative costs of performing common carrier and private hauler motor truck service and potential railroad L.C.L. service costs per 100 pounds of freight for representative distances between 50 and 300 miles used in arriving at this conclusion are shown below:

Distance	Common Carrier Truck	Private Truck Hauler	Potential Rail L.C.L. Service
50 miles	21c.	11c.	27c.
75 miles	26c.	16c.	28c.
100 miles	30c.	21c.	30c.
200 miles	47c.	42c.	36c.
300 miles	63c.	63c.	42c.

The effect of this would be to establish three mileage or distance zones of "comparative utility," one within 75 miles, within which the motor carrier possesses a clear comparative advantage; another beyond 150 miles, in which the proposed rail L.C.L. service would have the comparative advantage, and a twilight zone between 75 and 150 miles, in which the type of service selected would depend upon the exigencies of particular cases, a sort of truck-rail twilight zone.

The changes in the organization and methods of the railroad, railway express and freight forwarding carriers proposed to bring about this economic balance and the elimination of wasteful and often destructive competition of rail and highway trucking services are radical, in that they go, as the word "radical" implies, to the root of the evil. The plan proposes:

1. The consolidation of the railroad L.C.L., the railway express and the freight forwarding merchandise services into two competing merchandise agencies or pools, each operating on a national scale throughout the United States, and each of comparable traffic and financial strength. These agencies are proposed to be owned by the railroads over which they operate, and managed by independent managements in which the public is represented. The contracts under which the agencies operate should encourage direct and economical routing of the railroad lines, *but should protect* the revenues of each participating railroad carrier.

2. That these proposed merchandise agencies collect and deliver the freight at the patrons' doors, and transport it in "shock-proof" rail equipment at over-all or door-to-door speeds of at least 20 miles per hour. No recommendation is made in the report with respect to the ownership and operation of the cartage vehicles, except to the extent to be discussed later. The speeds suggested for merchandise rail service generally may be summarized as follows:

Service between points separated by:	Time of Service Delivery
350 miles or less	Over-night
900 miles or less	Second morning
1500 miles or less	Third morning
2100 miles or less	Fourth morning
2700 miles or less	Fifth morning
3300 miles or less	Sixth morning

Faster merchandise service at speeds of 35 miles per hour or over is recommended to be afforded on limited passenger trains between points between which these fast trains are operated so as to provide second-morning delivery within 1500 miles, third-morning delivery within 2500 miles, and fourth-morning delivery within 3400 miles.

3. That the present railroad L.C.L. merchandise classification, rate and packing regulations be completely abandoned and in their places substituted a simplified classification system, a simplified rate structure based upon the geographical location of the points of origin and destination, and simplified packing requirements. The report proposes that all articles of merchandise be placed in a first or standard class, with certain specifically named *heavy articles* grouped in a lower second class; and certain other enumerated *very heavy articles* grouped in a still-lower third class. This would replace with one standard and two exceptional classes, the present multitudinous classes and exceptions used in connection with railroad L.C.L. freight, the express classification and the forwarding companies' classification arrangements which are based upon the railroad classification system.

The rate structure proposed is a standard scale adjusted to meet the requirements of transportation conditions in different sections of the country, based upon full operating costs plus taxes plus a fair profit, *designed so as to make unprofitable the handling of merchandise by highway for distances in excess of 150 miles, and the handling of merchandise by rail for distances under 75 miles.* The distance between the points is recommended to be determined for rate-making purposes by measuring in degrees of latitude and longitude instead of in miles. The rates between two points are determined by locating the points of origin and destination and computing the difference of their latitudes and longitudes.

4. That rail and highway transportation be coordinated by contract, joint rate or lease arrangements or by ownership of motor trucks by the rail merchandise agencies, so that merchandise traffic may be concentrated at and delivered from a limited number of key concentration stations by motor truck and moved between these concentration stations by rail in car lots. This would tend to place the railroad and the motor truck in a supplemental rather than a competitive relationship.

• *The Exchange Proposal*

The Section of Transportation Service of the F.C.O.T. estimates that there are over 3,000,000 tons of merchandise moving by highway for distances over 250 miles, and over 12,000,000 tons for distances between 50 and 250 miles. Approximately 10,000,000 tons of less-than-carload freight are being transported by rail for distances under 50 miles, most of which could be hauled more efficiently by highway. "Coordination as a supplement to modernized service and tariffs (rates) would result in the exchange of this tonnage so that there should be returned to the rails at least 10,000,000 tons of long-haul traffic now moving by highway, and there should be diverted to the highway an equivalent amount of short-haul tonnage now moving by rail."

In short, the report proposes that the railroads, express carriers and forwarders on the one hand, and motor carriers on the other, arrange to swap approximately equivalent quantities of merchandise tonnage, so that each can operate with greater efficiency and profit in the distance zones in which the rail and the motor carriers have the greater comparative advantage in efficiency, so that the shipping public is given the advantage of a system of transportation which utilizes to the full extent the economies of each type of transportation—rail and road.

The report of the Section of Transportation Service has been forwarded by the Federal Coordinator of Transportation to the regional coordinating committees of the rail carriers and to the regional labor committees. The matter is now up to the railroads. They may adopt the plan in whole or in part, or they may offer a better plan, if one can be devised.

(CONTINUED FROM PAGE 11)

The extension part was logical because the code, as approved, provided for the registration of all members of the industry within 30 days after the effective date, and the election of state code authorities within 60 days after the effective date by members "who have registered as required."

In granting the application for extension of the time limit, Administrator Johnson stated that it appeared such modification should be granted "because of the complexity and size of the industry." So he ordered that "all periods specified in said code within which compliance shall be required and all periods within which elections shall be held and the period within which members of the industry shall register and report are hereby extended so that the commencement of the time with reference thereto shall be computed from the date of March 30, 1934."

And even so—assuming that the assessment hearing will be perfunctory and will be followed by NRA approval of the established fees—it is doubtful if the registrations can be handled in the few remaining days of April.

THE private carrier matter was handled in the form of an amendment to Article II, Section 1-B-(1) which specifies that the code shall apply to vehicles not for hire except to the extent that such transportation is subject to any other approved code of fair competition. The following amendment was ordered added to this:

"Such vehicles when also subject to any other code shall be registered under this code, by the person or other form of enterprise controlling the operation thereof, who shall furnish reports and pay equitable assessments under the code based on the code incident to registration and reports, all as may be approved by the administrator.

"The above amendment and the approval thereof shall take effect on April 5, 1934, unless good cause to the contrary is shown to the Administrator in Room 4217, Commerce Building, before that time and the Administrator issues a subsequent order to that effect."

In a sense this amendment threw the code wide open for further wrangling and dispute. It permitted private carriers to come forward and assert their rights to exemption. Fortunately for the code there was a decided limit to the time (score this point for the National Code Authority) when such exemptions could be claimed—April 5—and the matter, moreover, did not receive widespread publicity. To the best of the writer's knowledge no exemptions were claimed.

No Action on Truck Retailing Code

UP to the time of going to press no action had yet been taken on the petition filed with the National Recovery Administration to include trucks above three-quarter-ton capacity under the marketing provisions of the Code of Fair Competition for the Motor Vehicle Retailing Trade.

It is understood that the representative character of the sponsors of the petition will be investigated before a hearing date is set to act on the request.

WITH the coming of April, code affairs began dancing to a faster tempo. Moestro Johnson started beating the time with an order simplifying the course of matters requiring decisions down the red-taped corridors of NRA. The solo adagio dances turned into waltzes and finally lively foxtrots.

Many temporary state code authorities were recommended and approved. The list is too lengthy for this space.

Then NRA approved regional breakdown of the United States made by the National Code Authority for the purpose of setting up Regional Code Authorities in the administration of the code. The regions and the state areas included in their boundaries are:

Region 1. Maine, New Hampshire, Massachusetts, Connecticut and Rhode Island.

Region 2. New York (Except New York City), New York City, New Jersey and Vermont.

Region 3. Pennsylvania, Delaware, District of Columbia, Maryland and West Virginia.

Region 4. Virginia, North Carolina, South Carolina, Georgia and Florida.

Region 5. Alabama, Kentucky, Tennessee and Mississippi.

Region 6. Ohio, Indiana, Michigan and Illinois.

Region 7. Oklahoma, Texas, Arkansas and Louisiana.

Region 8. Iowa, Nebraska, Missouri and Kansas.

Region 9. North Dakota, South Dakota, Minnesota and Wisconsin.

Region 10. Colorado, Wyoming and New Mexico.

Region 11. Montana, Idaho, Oregon, Washington and Utah.

Region 12. Arizona, Nevada and California.

AFTER this came a reassuring announcement from NRA headquarters stating that "plans for registration of 1,600,000 vehicles under the code are nearing completion," with the General quoted as saying that "The NRA code for this industry is an important step toward stabilization of the trucking industry" and that "this Administration will exert every effort to effect this code and to enforce compliance."

The next progressive step was the calling of the hearing on assessments which was discussed earlier in this article.

The latest is the approval given to the by-laws and administrative regulations for State Code Authorities.

THE by-laws define the State Code Authorities as agencies of the National Code Authority and distinctly states that the Code Authority and the American Trucking Associations, Inc., and affiliated constituents are separate entities, but that the Code Authorities may employ associations as agencies. Where the Code Authority makes use of any trade association facilities in carrying out its administrative function, it is specifically cautioned to avoid discrimination against non-members of such association.

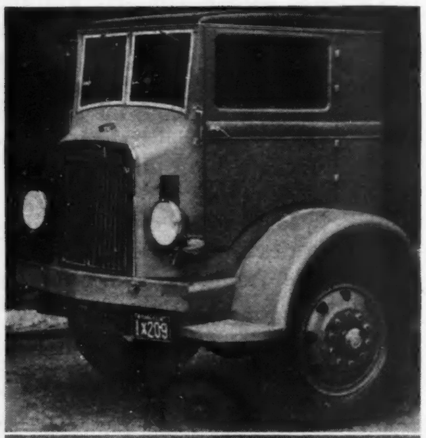
State Code Authorities, according to the regulations, have no power to interpret the code, grant exceptions under it or exceptions from it. All interpretations of the code must be made by the National Code Authority with the approval of the Administrator.

It will be the duty of the State Code Authority to collect from members of the industry the information and statistics required under the code.

The records and accounts of the State Code Authorities shall be open to inspection by the National Code Authority or its agents.

AS the code and all its administrative trappings now stand, it is probable that they represent the nearest approach to the ideal that NRA officials have evolved from their experience. It is a pattern they will very likely follow in revising many approved codes to eliminate their bad features. The trucking code, for this reason, should, once it becomes operative, rapidly realize the goal of the industry; self-regulation, employment of 300,000 additional wage earners and stabilization of a mighty industry which is certain to contribute even more to the future economic welfare of the nation than it has in the past.

What's Back of the Come-Back of the Camel-Back?



At top—The Autocar cab is entered by means of one step in the front

Center—Two front steps lead to the cab of the camel-back

Above—Mack has two steps located on the back of the front fender

BORN of seemingly unrestrained and certainly unstandardized legislative restrictions on heavy duty road transport the country over, a new type of vehicle has made its appearance in trucking circles. I use the term "new" advisedly since to those who are of the trucking industry this vehicle resurrects the shade of a construction which was rather common many years ago, save for profound improvements in mechanical design and incomparable refinement in appearance.

From now on the truck buyer will have to select his heavy duty equipment from a group of vehicles described as "cab-over-engine," "engine-under-seat," "camel-back," "traffic," and other terms yet to be coined. The thing to bear in mind is that, essentially, all these terms are intended to describe a vehicle of a specific design, hereinafter called "close-coupled," featuring a weight distribution of one-third of the gross weight on the front axle and two-thirds on the rear.

It seems to be a commonly accepted fact that we have been rapidly approaching the point where the highly developed conventional type of motor truck was becoming hampered by legislative restrictions in many localities to the point where it was in imminent danger of being outlawed. The new "close-coupled" vehicle meets the legislative requirements, at least as they are written at the present, so admirably as to make that fact sufficient economic justification for its wide acceptance.

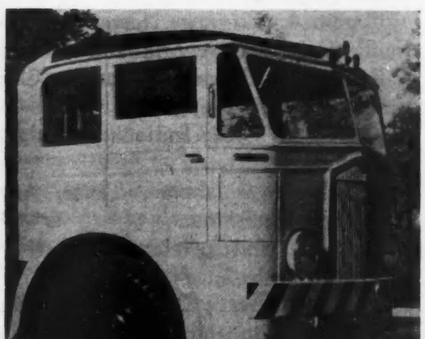
So far as can be learned, the following three legal requirements wrote the specifications for the new construction:

1. Limitation on rear axle loading.
2. Limitation of gross weight.
3. Limitation on the overall length of single units and combinations.

From a purely engineering point of view, the matter of getting a weight distribution of 1/3-2/3 can be handled in a number of ways, each one involving some serious compromise, as will be evident from the following analysis. The various arrangements that have been investigated are:

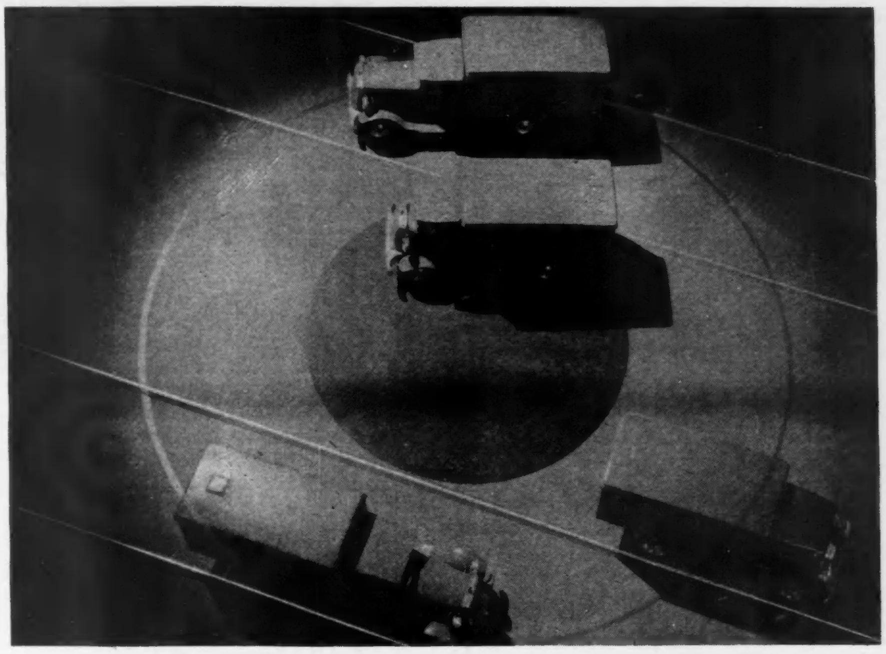
1. Moving the rear axle back. This is objectionable because it leads to excessive wheelbase length.

2. Moving the front axle back, commonly termed the "set-back front axle construction." This has been done in existing chassis as for example on General Motors and Mack trucks with a distribution of 30-70. However, this does not reduce the wheelbase to any great extent since the rear axle must be moved back at the same time. And, to obtain a 1/3-2/3 distribution with this arrangement would entail a still further sacrifice in wheelbase and maneuverability.



The Sterling cab is entered by means of a single step in front

Mechanics may stand upright in handling Autocar major overhauls



By Joseph Geschelin

THIS article analyzes the reasons which have guided certain truck makers in bringing out the so-called camel-back design. The reasons, briefly, are to place trucks within reach of users which will enable them to overcome legal restrictions.

The article is based on a paper written by the author, who is a member of the Chilton editorial staff, and read at the April meeting of the Metropolitan Section of the S.A.E.

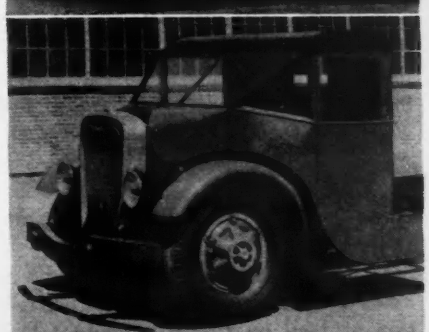
3. By combining a partly set-back front axle and a close-coupled cab; also by moving the cab forward so that a portion of the engine protrudes into the cab. Either construction meets the requirements of the desired weight distribution but does not produce the maximum economy in loading space and overall length.

4. Moving the cab completely forward over the front axle and at the same time moving the rear axle forward, thus reducing materially the wheelbase for a given body length. This construction is the one that has been widely adopted.

To visualize how these alternate constructions actually compare in practice, I am using the example given by B. B. Bachman in a paper read before the Philadelphia Section, SAE, in December, 1933, and published in COMMERCIAL CAR JOURNAL for January, 1934. Referring to Fig. 1, the comparisons are made with reference to a conventional vehicle on 184 in. wheelbase with ¼-¾ distribution. Please refer to sketch A.

"If the attempt is made to attain 1/3-2/3 on the same construction it will be necessary to increase the wheelbase 23 inches, making a total of 207 inches, as shown in sketch B. In the second case, sketch C, by moving the front axle back 13 inches and moving the rear axle back 17 inches, a 1/3-2/3 distribution can be obtained with a wheelbase of 188 inches. In the under-the-seat model, sketch D, due to the great shortening of the overall length and the relocation of weights resulting in a change in the center of gravity, the wheelbase is reduced to 128 inches, an actual reduction of over 30 per cent.

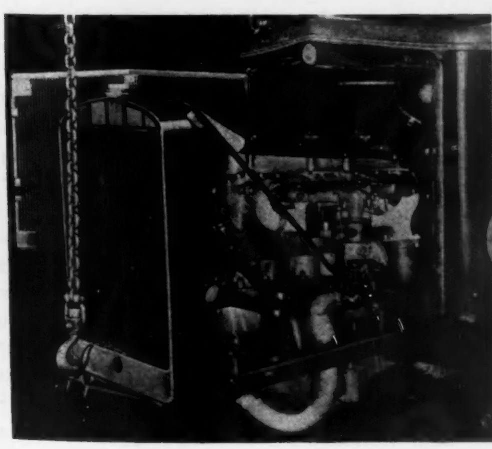
"It is also to be noted that although moving the rear axle back does not change the overall length of the vehicle, it does result in a definite increase in the turning circle. In Case 2, there is a saving of about 10½ inches in overall length and a very slight increase in turning circle, while with the under-seat



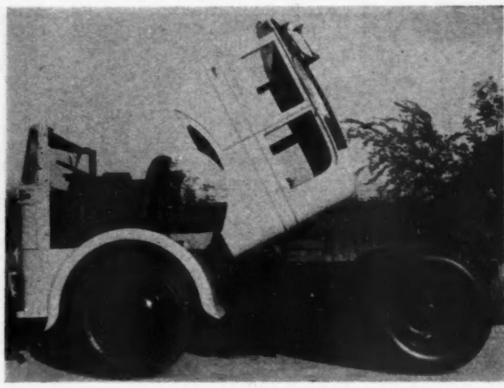
At top—The Hendrickson camel-back cab is entered by one rear step

Center—The low-hung Curtis Bill has cab moved forward over engine

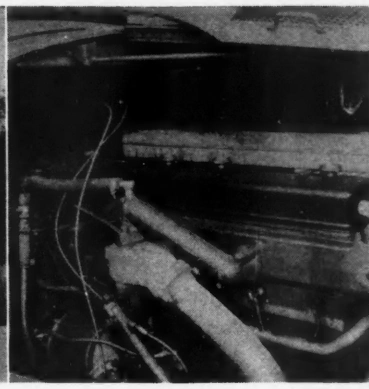
Above—The White K series has the cab moved forward over the engine



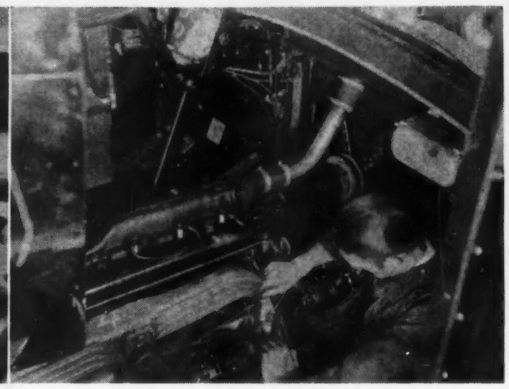
The GMC powerplant may be slid out for major overhauls. The mechanic is shown working on a minor job inside the cab compartment



The cab of the Sterling tilts to permit major overhaul accessibility



Accessibility in the White K model is conventional



In the Mack the mechanic may stand in space between engine and frame

model there is a reduction of nearly 51 inches in overall length and a reduction of 25 feet in the turning circle diameter."

Mr. Bachman did not cover the construction which is typified by the White K Series. The White construction permits the use of a longer body with the same wheelbase or the same length bodies with shorter wheelbase with a somewhat shorter overall length for the same body lengths, although the economy in overall length and turning radius does not approach the gain in "camel-back" construction.

Because the limitations are imposed on both length and weight, the "camel-back" construction has been widely adopted because it is the only one that answers both requirements.

• *Unique Advantages*

Taking the current "close-coupled" designs at their face value and assuming that the vehicles have been designed according to prevailing high standards we find that the new construction offers a great number of advantages apart from meeting the legislative requirements.

1. Ideal distribution of weight on rear axles resulting in a uniform distribution of load on tire equipment. This should result in considerable economy since the rear tires no longer will be overloaded.

2. Liberal gain in gross weight with the same axle loading.

3. Better maneuverability due to the short wheelbase.

4. Better ride for the driver due to location over the springs.

5. Ideal visibility unapproached by any other type of construction.

6. Increased loading space of 3 to 6 ft. depending upon make.

7. Increased loading space permits the operator to use his present body and trailer equipment and yet, in most cases, to come within the length limitations.

8. On tractor semi-trailer applications the king pin can be so located as to throw a greater proportion of the load on the front axle of the tractor. This is particularly marked in inter-state vehicles involving the use of sleeper-cabs which add about two feet to the length of the tractor. With a short wheelbase job it is perfectly possible to accommodate a long cab and yet permit the mounting of the fifth wheel well in front of the rear axle.

9. Special vocational applications, as for example, milk delivery, dump trucks, coal trucks, store-door delivery involving a combination unit, inter-city hauling, etc.

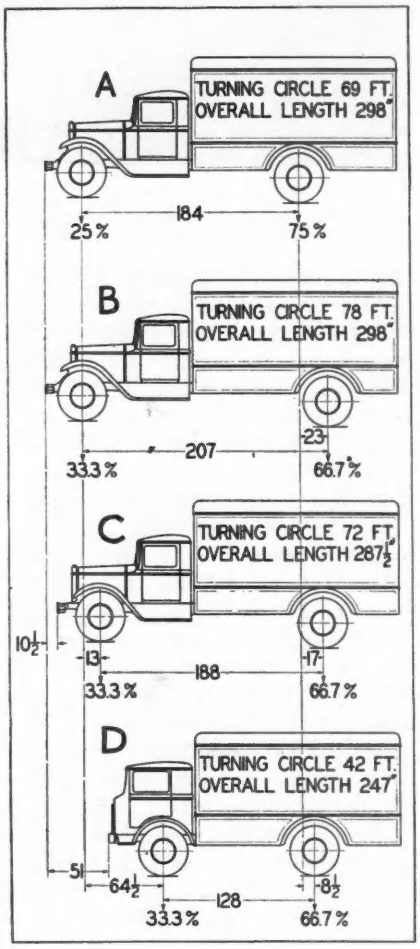


Fig. 1. Showing how different axle arrangements affect chassis design

It seems obvious from an analysis of designs now in production that the various truck organizations have been able to produce a vehicle which is safe, comfortable, and as easy to operate as the conventional job; also one which is not particularly difficult to service. Of course the degree in which these elements are present varies with makes.

• *Analysis of Specific Designs*

The element which seems to be getting the greatest emphasis is that of engine accessibility. This doubtless because of the fallacy accepted by many operators that if the engine isn't placed out in front of the cab under a hood of its own, its inaccessibility is a thing to be reckoned with.

Nevertheless, manufacturers, accepting this emphasis as evidence of buyer resistance have recognized its importance by devising a variety of arrangements, each claiming that his affords the greatest degree of accessibility. Since each designer has approached the problem conscientiously the choice of design, so far as the individual operator is concerned, is a matter of personal preference.

Thus in the Autocar design, for minor repairs and adjustments the engine is readily accessible from within the cab simply by removing the seat cushions and folding back the hinged seat back. For major overhauls requiring removal of the cylinder head, by removing the right fender splash guard, which is attached by means of five wing nuts, there is provided sufficient space to enable the mechanic to get directly at the engine without jacking up the wheels or removing the engine from the chassis.

In the General Motors Truck job the engine is exposed by the removal of a hood within the cab which is secured by latches. For major overhauls the engine is arranged to slide out either partly or completely. For this purpose the engine is mounted on a sub-frame rolling easily on rollers mounted inside of the side rails.

(TURN TO PAGE 20, PLEASE)

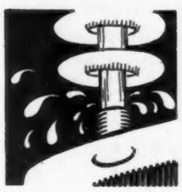
Mr. George T. Hook, Editor
Commercial Car Journal

Dear George: I am sending herewith an outline of a request for repair work which was made by one of our dealer service operators. It appears to be a little too good to be thrown in the waste basket. If you can make any use of it, you are welcome.
F. L. Faulkner, Automotive Department, Armour & Co.

Truck No. One-O-One-Six-Eight

I. BODY

The dents are few—in fact just one—it's in the right front fender,
Please ding it out to look like new, and I'll applaud the mender.
And if you have some time to spare,
A dab of paint just here and there
Will make the butchers glad to see
This car from Armour's family,
And all the grocers near and far
Will hail it as a brand new car.
For Wilson has a new Ford Eight and Swift a Chevy Six,
So Armour needs a snappy car to show those boys some tricks.



II. RADIATOR

The radiator leaks a bit, please fix it up—and say,
Don't spill the liquid cause it's filled with Armour's G.P.A.
And don't leave grease or dirt or flux within the cooling cells,
For if you do the G.P.A. will boil and foam and smell,
And when it hits some spot that's hot
You'll swear, by gad, it's what it's not!

III. BATTERY & GENERATOR

The battery's only two months old—it cost nine and a quarter—
But check the specific gravity, and feed it distilled water.
The generator is quite new so don't disturb the stator,
Just take a piece of emery cloth and clean the commutator.

IV. CARBON & VALVES

The carbon was scraped at 23 "thou," the valves were ground then, too;
It's needed bad after 23 more, so see what you can do.

V. IGNITION

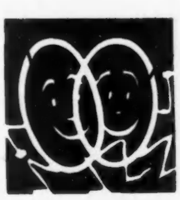
Ignition's bad, it makes me mad.
Under the hood and 'neath the dash
The sparks jump to and fro;
I look for them—just miss a crash!
What's wrong I do not know.
Why it makes the wagon jerk and buck
Till you're sure as hell of getting stuck.

VI. TIRES

The tires are new on all four wheels,
It's only a good spare we're needing;
But the rims are so pitted
When the new tires are fitted
They fail very soon at the beading.

VII. CARBURETOR

The carburetor's full of muck; it needs a good de-griming
To get more miles from gasoline and do away with priming.



VIII. PISTON RINGS

The piston rings are all worn out; the cylinder walls need honing
Before you snap new rings in place. Then Armour will do less groaning
For oil this engine eats in gobs—
Enough to run two diesel jobs.
And that will make less trouble—see?
Cause big oil bills are blamed on me!

IX. BRAKES

From the container 'neath the hood (it's in the braking system)
The oil leaks out—please make it tight, and fix the master piston.
Emergency needs tightening (though only used for parking),
A turn or two will do the trick to keep the truck from "larking."

X. TRANSMISSION & REAR END

The transmission grease is just like soap—that goes for rear end, too,
Please fill them both with "winter grease," so the gears will slide right through.

XI. REMARKS

It really is not as bad as it sounds,
(The truck, I mean, not the verse);
But those are the things that are wrong with my truck—
It could be a whole lot worse.
And whether the notes are on knicks or on knacks,
I hope they're not too galling.
What's really needed—to get to brass tacks—
IS THOROUGH OVERHAULING

Signed
W. H. Kissler

What's Back of the Come-Back of the Camel-Back?

(Continued from page 18)

Hendrickson has a hood inside the cab large enough to permit working on valves and ignition. For further accessibility, there are hinged hood sides between the top of the frame and the bottom of the cab which in combination with the wide track axles permit adjustments on tappets and the carburetor. For major overhauls, the engine can be reached by removing the integral bumper and front cross member. The radiator guard, radiator and cross member are designed for ready removal.

In the Mack the engine enclosure is in two parts. The main housing may be raised by removing the seat and back cushions of the middle seat for access to spark plugs, distributor, generator, oil filter and valve tappets. The two side seats fold up out of the way and the floor boards lift out affording access to the rest of the engine. For major overhauls the entire power plant may be removed through the front after removing the radiator.

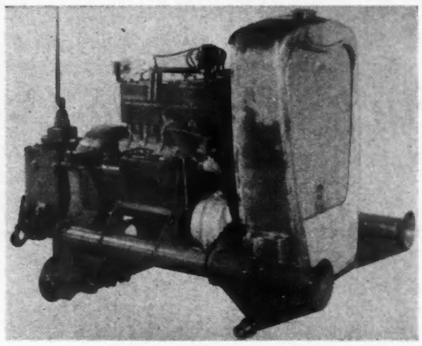
In the Sterling for more repairs and adjustments the engine is made accessible simply by the removal of the inside aluminum hood which is located directly between the two bucket seats. For major overhauls which require removal of the engine, the cab has been so arranged as to tilt back on hinge pins, as in the case of a tractor unit; or the cab can be entirely removed by taking out the hinge pins in the case of a truck unit with a body in place.

In the White K series, engine accessibility is entirely conventional, the unique feature being the fact that even the overhead valve engines have all accessories located on the right hand side where they are readily accessible in a group.

The Curtis-Bill powerplant, while not as accessible for minor repairs and adjustments as the other "close-coupled" jobs, for major overhaul accessibility has been worked out in excellent fashion. The entire front-drive unit is mounted in a sub-frame whose backbone consists of two tubular members which telescope over the tubular main frame and are fastened in place by means of large nuts over the ends. This permits the removal of the entire powerplant in a very simple operation.

• *Control Functions*

From the point of view of the operator, as well as that of the designing engineer, questions have been raised at various times concerning the simplest way of working out the remote control of the functions of steering, gearshifting and clutch operation. Behind these questions is the fact that with the new



The entire powerplant of the Curtis Bill slides out. Tubular side-members telescope over tubular frame

construction the driver and consequently his controls are quite unconventionally located and the linkage between the controls and the corresponding units are inclined to become quite complicated.

While this complication undoubtedly exists, none of the organizations participating in this movement seems to have had any particular difficulty in finding a practical solution. So far as I can learn, all of the jobs now in production have continued the use of manually operated steering gear, clutch, and gear shift. Sterling seems to be the only one using an air-controlled clutch among the production jobs.

So far as gear shifting is concerned, on the Mack job this has been accomplished by building the complete shifter mechanism into the transmission in the conventional manner on the unit power plant transmission but extending it to the left instead of up through the top; then by means of a simple sliding and rocking rod connection to the conventional ball-jointed gearshift lever, it is possible to secure a very effective layout.

On the General Motors job, the shifting operation requires an up and down motion instead of the usual forward and back motion. They effect a direct gearshift control without rods or intermediate connections by using a long lever and placing the fulcrum of the gearshift lever in a higher position over the transmission gear case. It is claimed that the function of shifting is as simple as on the conventional job.

At the present writing, none of the organizations with which I have been in contact contemplates power steering. A number of prominent engineers tell me that with 1/3-2/3 gross weight distribution, manual steering seems to present no problems and, in fact, is comparable with the steering of modern buses due to the refinements incorporated in the steering gears now available. I am told further that the experimental work of several organizations indicates that manual steering, at least on motor trucks, is perfectly feasible up to a limit of about 9000 lb. weight on the front axle, and inasmuch as this represents the maximum gross weight permitted by law, these organizations feel that it is unnecessary for them to consider power steering.

However, the steering problem is of such vital importance that engineers cannot overlook the possibilities offered by some practical form of servo mechanism. In recent correspondence, S. Johnson, Jr., of the Bendix-Westinghouse Automotive Air Brake Co., says that he does not question the ability to steer manually with 9000 lb. load on the front wheels if the steering gear ratios are stepped up high enough. However, when about 10,000 lb. load on the front axle is exceeded he believes that power steering is positively required. He also feels that the time is not far off when vehicles with loads around 8000 lb. on the front wheels will use power steering because of the obvious advantage of lower steering gear ratios. Another feature of the power steering mechanism which is stressed by Mr. Johnson, is the reduction of load on the steering gear mechanism. With the Bendix-Westinghouse design it is claimed that this can be reduced to approximately one-fourth of what it normally is with manual operation.

• *Unconventional Engines*

It seems quite pertinent to make at least passing reference to the possibility of applying some hitherto unconventional types of engines to the new construction in order to promote greater accessibility. One of the possibilities of

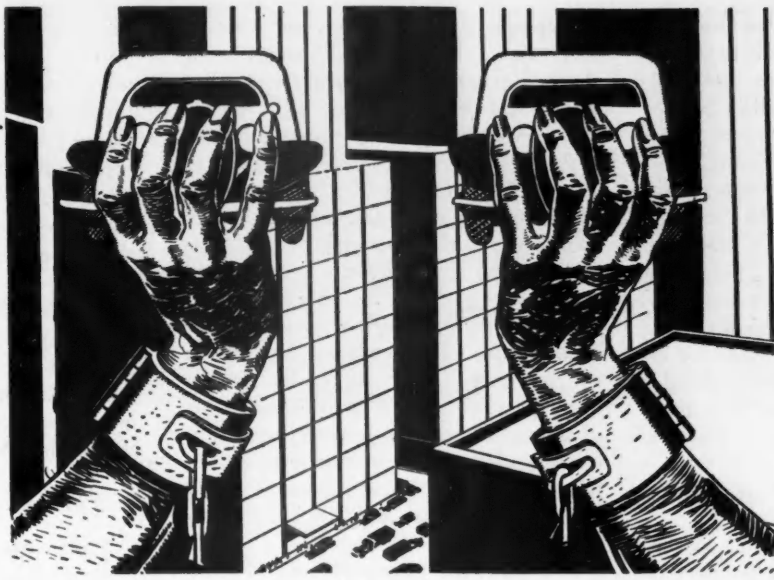
(Turn to page 28, please)

Camel-back Conclusions

In concluding this study, I should like to make the following points:

1. The new design is definitely born of legislative restrictions particularly (a) limitation on axle loading; (b) limitation on gross weight; (c) limitation on the overall length of single vehicles and combinations.

2. The special advantages of the new construction are (a) ideal weight distribution for tires; (b) shorter turning circle and, consequently, better maneuverability; (c) an increase in gross load with the same body length; (d) increased loading space within prescribed length limitations.



Can Business Groups Jointly Own Trucks and Avoid For-Hire Laws?

By Fred. A. Eldean

Counsellor-at-Law

If one man can own and operate his own truck, why can't two or more join together in truck ownership and operation, may be asked, without being subject to any greater regulation than that of the singly-owned trucks?

Should regulation of for-hire motor transport cause the rate-level to reach a point where private industry could more economically and with a fair degree of convenience operate private vehicles, it undoubtedly would do so. This might easily be done by a large industry. But what about the small fellow?

Suppose he follows the lead of the Montana case and together with another or others purchases a motor truck to be used by them jointly. Is "joint ownership and operation" a possible solution?

This unanswered question is raised without any attempt to pass on its practical feasibility or desirability but to stimulate thinking on its possibilities and its legal implications.

SOME merchants in a Montana city desiring to economize in their transport costs have adopted a novel truck purchase and share-expense operation system, the legality of which was recently sustained by the highest court in that State.

The essentials of the plan are as follows: Through a Merchants' Mutual Service organization the participating merchants agreed to purchase a truck upon installments. The truck (other trucks are to be added as needed) is to be used exclusively for transporting merchandise sold or purchased by the members for delivery to each other and to their respective customers. The purchase price and the expense of upkeep, repair, replacement, operation, including wages for necessary help employed in the operation, management and use of the truck, are to be paid for monthly upon the basis and ratio of the weight of merchandise carried for each mile for each member.

The seller of the truck was made transportation manager upon a salary, plus a bonus basis when a majority of the members vote such for good service.

Neither the Merchants' Mutual Service nor the seller (the transportation-manager-operator) of the truck were held to be within the motor carrier regulatory law which includes those "motor carriers operating for hire."

While the court decision holds the plan does not subject the parties to the control of the motor carrier act, it is to be noted that this is an exceptional case. Many cases in which somewhat similar arrangements have been put into effect have resulted in totally different decisions.

But it is perhaps the modified features of this particular arrangement which distinguish this case from the others.

Consequently it will be well to examine the other arrangements to see wherein they failed to come within the pale of legal sanction.

In a Florida case where some merchants organized a cooperative association not for profit, known as the Merchants' Mutual Association, for the express purpose of conducting the business of hauling by motor trucks for compensation the goods, wares and merchandise of its stockholders only, the court held that while it was not a common carrier, as "by limiting its patronage to its stockholders, it successfully eliminates itself from that classification," it nevertheless is by virtue of the contracts of carriage between the corporation and the members subject to the law governing contract carriers.

The contract carrier provision embraces those not operating as common carriers who haul for compensation under contract where the service consists of continuous or recurring carriage under the same contracts.

The Florida arrangement comes the

nearest of any perhaps to the Montana case. Admittedly it is difficult to distinguish the two. In so far as there appears to be a difference at all in the arrangement, it relates to the express incorporaion to carry (even though not for a profit) still for a *compensation*. In the Montana case, there is no carriage for compensation but a direct contribution to expenses.

If one man can own and operate his own truck, why can't two or more join together in truck ownership and operation, may be asked, without being subject to any greater regulation than that of the singly-owned truck?

• *What About Small Fellows?*

Should regulation of for-hire motor transport cause the rate-level to reach a point where private industry could more economically and with a fair degree of convenience operate private vehicles, it undoubtedly would do so. This might easily be done by a large industry. But what about the small fellow?

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A Texas case which, while it does not involve a business association, is of interest as indicating how an apparently simple business arrangement may be sufficient to throw one into a "for-hire" class.

Armour & Co., to supplement its own trucks, engaged a truck under the following conditions: The owner of the truck was to supply it for Armour & Co.'s exclusive use for a certain period upon a stated weekly compensation. The truck owner was to keep the truck in good condition and to substitute another if the first became unserviceable. He was to pay all expenses of operation including the driver's salary. The driver, however, was to be under Armour & Co.'s exclusive control. He was also to hold Armour & Co. harmless against any claim of the driver under the Workmen's Compensation law. He was also responsible for the prompt remittance of any collections made by the driver.

The truck owner was held to be a contract carrier upon the view that he was operating the truck upon the highway for compensation.

This result seems subject to considerable question. However, it indicates the necessity of not injecting elements into the arrangement which might result in its being construed to be a "for-hire" carrier operation.

Suppose, instead of paying a stated sum as a "cover-all expense," the driver's wages and compensation insurance (*and other necessary insurance—see* COMMERCIAL CAR JOURNAL, *February, 1934, "Who is Liable—Shipper or Trucker" article page 17*) had been provided by Armour & Co. and he had in fact become their employee; and further that the truck owner was to be paid on a mileage basis for the use of his truck. The truck owner in that situation, getting a compensation for the use of his truck, is after all in effect in the same position as the conditional seller of the truck. Surely it would require a considerable strain on the imagination to conclude such an arrangement would make the truck-owner a "for-hire" operator.

Recently the Pennsylvania Public Service Commission had before it the perplexing problem of the status of the truckmen who hauled for a dairymen farmers' cooperative organization.

This association had approximately 17,000 members. Its stated purposes were the improvement of marketing conditions by securing advantages in the sale of milk and the provision of trucking facilities for transportation of milk. Any person could become a member by buying one share of stock for $2.50 and one share at the same price for each ten cows in excess of the first ten.

Three-party agreements were executed between the farmer, the association and the trucker. The trucker agrees to collect the milk daily and each farmer agrees to consign his milk by the named trucker. The milk receiving depot remits its check for the milk to the farmers less transportation charges. The check to cover transportation is sent to the association office. After deducting six-tenths of one per cent for its services the association remits the balance to the truckers.

• *Heed Common Carriers*

The Commission held that the truckers were common carriers. As reasons for this conclusion the Commission points to these arguments: There was evidence that one trucker actually solicited business of some non-members; that the association itself solicited new business; that the truckers had acquired many new shippers' business and "if they had not actively solicited new business, have at least held themselves out as willing to accept hauling for new producers."

Further, it pointed out that the transportation of milk was a substantial business of itself and not incidental to some other line of activity engaged in by them and this makes rendering of this service a public calling.

The Commission complains that if service to such a large group were exempted, its regulation might be impaired. The courts have frequently stated they cannot legislate. Assuming the operations were not within the regulatory law and if the predicted unhappy condition resulted, the remedy would be with the legislature. However, the Commission may have anticipated that the farmers' political strength would prevent any legislative enactment. It will be interesting to see what happens upon appeal in this case or what may result in the legislature should the farm group present a bill taking their trucking operations of this character out of the common carrier category entirely.

• *Farmers Tried This*

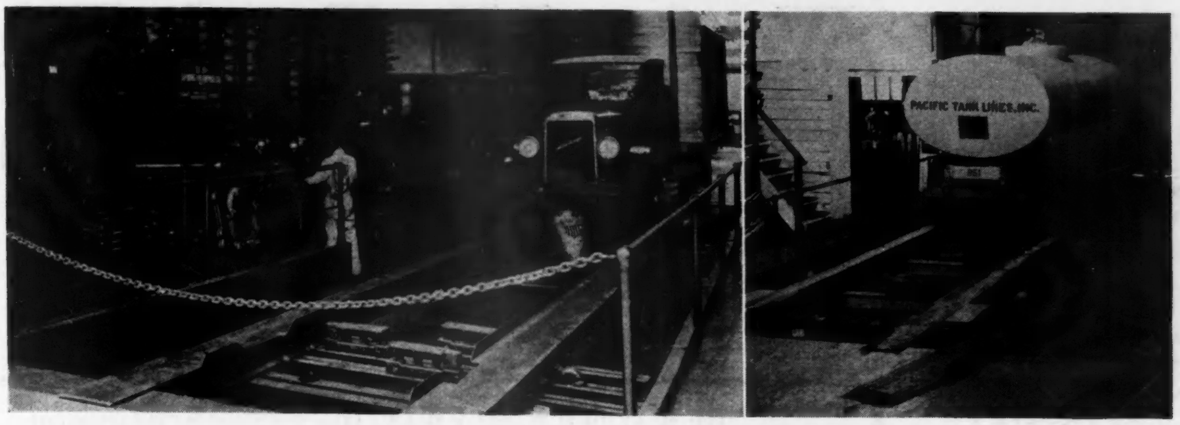
A plan whereby a Farmers' Exchange received a bill of sale for livestock at the time the truckman employed by the Exchange loaded the stock on the truck and under which the price to be paid the farmer was computed upon the basis of the price received at the stockyards less 60 cents per 100 pounds for transportation which was divided 50 cents to the truckman and 10 cents to the association was held by the Ohio appellate court a mere device to evade the law and the trucker was a common carrier.

An early Colorado case held a trucker hauling for an association which included 90 per cent of all shippers in the territory a common carrier on the ground that the public served is so large as to be the public.

In a farmers' cooperative case is Maryland, the court reached the result that the cooperative organization, while not a common carrier, was nevertheless subject to its statutory provisions governing the operation of public carriers.

There have been at least two cases in which associations of theatre operators have been organized to transport their films, one an Ohio case and the other an Iowa case, in each of which membership in the association was open to any film exhibitor who would purchase stock. It was pointed out in the Iowa case that there were no offices, no meetings, no dues; in fact, there were lacking, in that case at least, any of the elements which might possibly bring an association out of the category of being a mere device for the evasion of common carrier regulations.

From the foregoing it will be seen that it is exceedingly difficult for a business association to conduct trucking operations without becoming subject to "for-hire" regulations. Undoubtedly, there will arise cases involving associations having a somewhat different setup from that involved in the cases here described. It will be interesting to note these developments and also the possible expansion of the "joint truck ownership and operation" idea.



This wheel alignment set-up in a West Coast service establishment is typical of the installations which Bear Mfg. Co. is promoting to take care of heavy-duty trucks and buses

• THE EAR-TO-THE-GROUND DEPARTMENT •

To Spare Tire Changers

SOMETHING decidedly new in the way of spare tire carriers for trucks will soon make its appearance. This carrier moves rearward on rollers, tilts downward and the spare tire slides to the ground after its anchorage is removed. The sliding carrier is locked in place under normal conditions. Every idea connected with it aims to make the changing of flat tires an almost effortless matter so far as the spare is concerned. If you are interested we'll tell the maker.

A New 1½-Ton FWD

FWD is coming out with a new 1½-ton, four-wheel-drive model with an 84-hp. engine. It will be capable of 50 m.p.h. fully loaded. The list price of $2,400 will be the lowest in the company's history. In appearance it will be a distinctive addition to the FWD line.

A Revolutionary Jack

The Vickers Mfg. Co. promises an early announcement of a new hydraulic jack which, Mr. Vickers informs us, represents a departure from all the old traditions of jack manufacture. It may be termed "revolutionary," he says. It is of the hand or tool-box type and will come in 3, 5, 8, 12, 16 and 20-ton capacities.

Names May Be Mentioned

Back in October we told you a large oil company was planning to market a new break-in oil within 30 days. Marketing plans, however, were not completed until last month. It's called Essolube Break-in Oil, and the large oil company is the Standard Oil Co. of N. J. It will be marketed exclusively through motor car dealers and repair shops.

Corbitt Plans New Types

The Corbitt Co. expects to bring out shortly some new types of vehicles. Chief Engineer Rawlins has promised to keep us posted.

You Can Save on Oil—

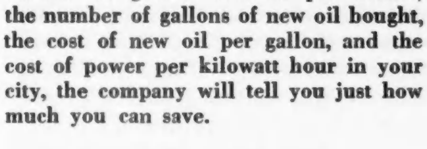
An oil reclaimer, designed for the smaller operator of trucks, has been made available by The Hilliard Corp. It will refine 360 gal. of dirty oil per month and, if run to capacity, will save more than $1,000 per year. The total cost of reclaiming ranges from 6 cents to 12 cents per gallon. If you'll tell us the number of vehicles you operate, the number of gallons drained per month, the number of gallons of new oil bought, the cost of new oil per gallon, and the cost of power per kilowatt hour in your city, the company will tell you just how much you can save.

Front-Drive Job Coming

A new front-drive truck is on its way. The manufacturer recently obtained a patent on a front-drive axle, and has promised us full technical details.

Reclaim as You Ride

Are you interested in an engine accessory which, the manufacturer claims, is not a mere oil filter, but "a real oil reclaimer, embodying the same principles" as a large commercial reclaimer put out by the same maker? Oil pressure is the driving force, and the exhaust heat is used to evaporate water and gasoline dilution. The dilution is fed right back into the manifold. The device is designed to do away with oil changing. If you want details, we'll get them for you.



What the well-dressed tank trailer of the future may look like is suggested in this design developed by Fruehauf. Major tank companies have approved it

Pancakes and Camel-Backs

Wherever fleet operators congregate the conversation eventually gets around to camel-back truck models. And then someone always begins speculating about the advantages of the pancake-type of engine in such a design. We expect to have a look at a truck chassis equipped with a pancake engine before the May issue goes to press. We hope to have something to report.

Bu-Gas vs. Butane

E. J. McClanahan, manager of the sales development department of the Standard Oil Co. of California, wishes us to make it clear that the word Bu-Gas, used in the January articles on butane, is a trademark adopted and registered by his company to distinguish its liquefied petroleum gases from those of the same nature marketed by others.

Still Just a Plan

Last month we intimated that a large passenger-car maker was planning to bring out a truck line. Our latest feed-box dope is that the plans apparently have been shelved. There remains, however, a possibility that the plans will be revived and the low-priced truck line marketed through an existing truck set-up.

Can 2 Frenchmen Be Wrong?

How long will it be before American manufacturers take a leaf out of the French book and make available to truck operators warning signals with distinct safety advantages? One of these French devices has a photoelectric cell on the rear of the truck body. When the lights of the car behind are turned on they operate the cell and sound a warning signal in the driver's cab. Another device, brought out by a radio maker, works by means of a microphone system. In both cases the truck driver can sit snugly in a modern enclosed, insulated cab and yet know instantly when asking for the "courtesy of the road."—G. T. H.

"We Cut Idle Truck Time 75% and Saved $2,000 a Year Per Truck"

By Walter S. McEwan, Jr., Fleet Supervisor
Oppenheim & McEwan Co., Inc., Wholesale Grocer, Albany, N. Y.

Who figures that if his trucks lose an hour a day his company loses the profit on $500 business

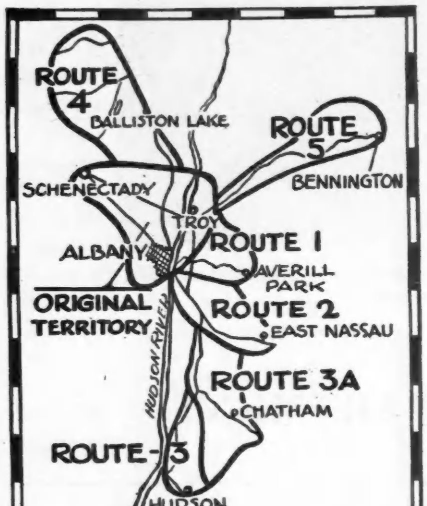


Fig. 1
Map of Truck Routes

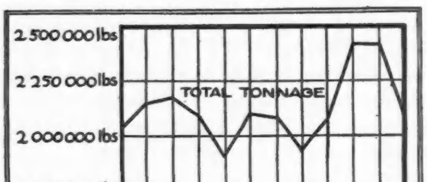


Fig. 2
Delivery Tonnage and Cost Record

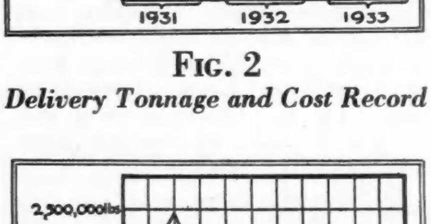


Fig. 3
Pick-up Tonnage and Cost Record

I AM ashamed to admit it, but our three trucks are now saving us $6000 a year. By reducing our fleet and at the same time extending our delivery territory, we have actually cut our unit costs in half. In the course of saving $2000 a truck, we reduced our idle time 75 per cent, cutting it from 29 per cent to 8 per cent.

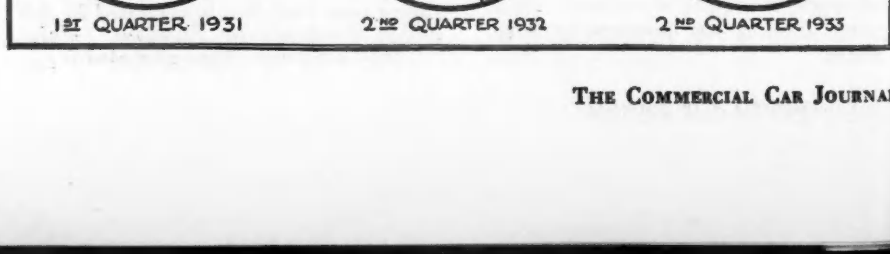
Oppenheim & McEwan Co., Inc., wholesale grocer of Albany, N. Y., serves a territory about 150 miles in diameter, in which it "normally" does about a million dollars' business. Twelve salesmen cover this territory on schedules which call for coverage each week or every other week. The firm employs about 30 more people in the administration and operation of the business. Besides the general wholesale business, the firm operates a separate coffee roasting plant and also holds the local franchise for the Arrowhead Stores, a voluntary chain organization.

In 1931 we were operating four truck units, one team and three practically identical automotive units of about 6 tons' capacity. Besides doing all our incoming hauling, these trucks handled all our deliveries in the original territory, as shown on the Map, Fig. 1. These deliveries accounted for 60 per cent of our outgoing tonnage. Outside truckers carried 35 per cent more, while customer calls and rail shipments took the remaining 5 per cent.

In late 1930 we moved from very inadequate quarters to our present plant and then worked out a record system to cover our entire operation. Our records were compiled from drivers' cards, shippers' reports, etc., to give us a complete picture of our entire operation.

The basis of our truck records is the hour. As originally 75 per cent of our truck overhead was fixed, we favored time rather than mileage. Furthermore, with wide differences in mileage per hour on our different types of work, and our need of exact costs for each individual type, a system based upon distance would have been very complicated. We determined the exact amount it cost us to operate a truck one hour. This is known as the Hourly Truck Cost and varies with the service and type of equipment, oats or gas (team or auto). This hourly cost is not constant

Fig. 4
Showing the Improvement in Profitable Use of Truck Time



ALTHOUGH Mr. McEwan operates a small fleet of trucks, the principles which caused him to increase the value of his truck equipment apply alike to all fleets. And since he expounds them very well, and proves their soundness with practical results, we think his article merits careful study.

If it stimulates thought and action in the direction of increasing truck working hours and thereby reducing idle truck time, it will have served its very constructive purpose.

but is revised as needed. Knowing the hourly truck cost, the number of hours taken by each tonnage movement, the tonnage, and the ratio of the productive and unproductive time, it is relatively simple to determine the unit cost for each type of work.

July, 1931, found us with six months' data on hand and improvements under way. We were working under a fixed program as we had found conditions so bad that very definite and major changes would have to be made in our operations if we were to accomplish anything. This program called for the reduction of our idle time by the cutting of our fleet and the extension of our delivery territory. The team was indicated as the unit which could best be spared; but sentiment stood in the way, and it was not until 1932 that we finally eliminated this unit. Our excess truck capacity was carried over from our old building where we had been forced to overcome our plant shortcomings by rolling equipment. As a result we were over-equipped and found ourselves with three full truck days a week for which we had no work. Our records showed us that our trucks were actually working only 50 per cent of the time.

Our only real solution was to extend our delivery territory, thus putting some of the idle time to work. Accordingly we worked out a program of delivery route extension, securing our tonnage from the 35 per cent carried by outside truckers. This program was based upon the fact that we could handle the extra tonnage without adding to our equipment. We planned to spread our fixed charges over a greater tonnage and thereby reduce the fixed costs per unit handled. As we already owned and maintained our equipment, whatever we secured over and above our bare operating expenses would apply against the fixed charges. Of course we were using the existing truck rates as a measuring stick.

The estimating of one of our first extensions will be outlined to show how we actually worked this out. This is the run, east of Troy, that is designated as Rural Route No. 1. Our Volume Record showed that we were sending about 1000 pounds into the towns in this section on alternate weeks, at a rate of 30 cents a hundred. We estimated that it would take a truck three hours to cover this territory and we used the current hourly truck cost of $2 to determine that the route cost would be $6 or 60 cents a hundred. However, with a 25 per cent operating cost ratio our actual added cost would be 15 cents a unit, which would leave the other 15 cents of the 30-cent rate to apply against the fixed overhead. We fully realized that our operating percentage was low for this work since the mileage per hour would be higher than it was in the city work upon which all our costs were based at that time. However, we had the assurance of the sales department that the tonnage would increase under our own delivery and we permitted this expected increase to balance the higher operating cost item. That we were safe in doing so proved to be the case. In fact, we began immediately to handle heavier orders and eventually carried enough tonnage to bring our own costs below the outside rates.

This increased tonnage came from several sources and accompanied all changes from outside truckers. For one thing, we frequently ran into towns to which we had been unable to secure satisfactory service. Also, with our trucks running into a town, we could carry items formerly prohibited by freight charges. We ourselves could carry these for the extra gas, etc. Then, naturally, our salesmen would work to sell a full load because they were paying for the trip whether the truck carried 5 tons or 500 pounds. The tonnage increase ran from 50 per cent to 150 per cent in the different territories under our own deliveries. Eventually we carried practically everything on these routes.

By July, 1931, we were operating on three rural routes, R. 1, R. 2, and R. 3A, as shown on the Map, Fig. 1. The first two were extension runs, the truck proceeding from the last city stop into the country; but Route 3A was entirely country work. It was on this latter run that we got our first really reliable costs on the new work and found that these figures were checked by those on the other two. With the introduction of these three runs we had taken up all the useable work and were then forced to wait for the sales department to make more available.

Some very definite progress had been made. Reference to our records showed that in the second half of the year our trucks had actually worked 140 hours on these runs. When this actual time was increased to include the platform and other unproductive time, it became 228 hours switched from waste to earning time. We were justified in charging these routes with their fair burden of unproductive time as our unit costs were approaching our former rates. There was no question but that this new work would eventually pay its way and was even now in a position to stand its full share of our fixed overhead. These 228 hours at the current hourly cost represented a service or route cost of $570. As the delivered tonnage was 70 tons, we were carrying these goods for about 40 cents a hundred. This compared very favorably with our former rates, especially since we knew our costs would drop with our rising efficiency.

Although we had started only three

small runs, we felt that very satisfactory results had been obtained. A type of work that had been undertaken to lower costs by spreading our fixed charges and which we expected to do little more than pay its bare added cost was paying its full cost, fixed as well as variable. As soon as we saw that this was the case, we changed our original plans and proceeded to actually compete with the outside truckers.

The year 1932 was the cost eventful of the three since we started work on our high costs. During 1931 we had worked out and proved our plans and we were now ready to go ahead on solid ground. The first event in 1932 was the starting of the Hudson run, Rural Route No. 3. This territory was covered by the Chatham (Route 3A) truck, which delivered that town on the return run. This Hudson route was especially important in that it used enough idle time to drop our city costs more than one cent a hundred.

The Hudson run filled our week with the exception of Wednesday, some of the formerly idle time having already been used in other changes to make the extension schedule possible. In April a day's work was made available on alternate Wednesdays, and we started Rural Route No. 4 as shown on the map. Because of unsatisfactory delivery we had not been obtaining profitable business in this territory and, at the request of the sales department, we had studied our covering of this section. In this particular case we reversed the procedure. We told the office what tonnage was needed to produce a given delivery cost. The tonnage necessary to give a reasonable figure was about twice normal. Our experience told us that we could expect this increase, and we started the run. The tonnage rapidly rose to a satisfactory figure, and, although higher than on any other route, the costs have always been within reason. As we are doing a very profitable business in this section, this run has always paid its way.

This was not all for the year 1932. In October we eliminated the team, with the drop in truck overhead shown in Fig. 2. Considering the amount of effort, this was the biggest move in the whole program. In one step we reduced our overhead by $3000 a year.

We were covering Route No. 4 every other Wednesday, but we were still short a day's work on the alternate week. This last gap was filled by our extension to Bennington, Vermont, in March, 1933.

With the institution of our Bennington run we completely filled out our scredule, finishing the extension program started two years before. While this particular work has been under way, we have been working to improve our trucking as a whole. While some progress has been made in this line, we have only recently begun serious work, since up to now our equipment has been equal to demands. Due to business conditions we have been giving the best possible service to our trade, with the result that considerable work is being done without regard to the finer points of truck operation.

An indication of the improvement that we have made is found in Fig. 4 which shows the percentage division of truck time for three representative quarters. It will be noted that our idle time has shrunk from 29 per cent to 8 per cent. A further sign of improvement occurs in the ratio of loading time and delivery time. When it is realized that considerable of this delivery work is done in the country where the tonnage handled per hour is one-third that in the city, and that we have actually kept the average tonnage handled per hour constant, it will be seen that we have already made definite progress.

The actual figures of the extension routes and the resulting costs follow:

	1931		1932		1933		TOTAL		Route Cost	Former Rate
ROUTE NO.	Tons	Cost	Tons	Cost	Tons	Cost	Tons	Cost	In Cents	100 lb.
1	8	$50	35	$220	39	$200	82	$470	29	30
2	36	$300	44	$390	55	$420	135	$1,110	41	35
3	26	$220	215	$1,615	203	$1,230	444	$3,065	35	40
4			36	$450	59	$572	95	$1,022	54	40
5					75	$533	75	$533	35	40
TOTAL	70	$570	330	$2,675	431	$1,955	840	$6,200	37	
COST in cents 100 lb.		40½		40½		34		37		

The behavior of our delivery costs is shown in Fig. 2. On this chart the Delivery Service charge has been averaged in two periods, the first ending with 1932 when the team was sold. This has been done to eliminate the effect of the pick up work and to show the true trend of our delivery costs for the three years.

As previously mentioned, our trucks were doing all our incoming hauling. The only room for improvement here was the general raising of efficiency. Furthermore, we had known that the costs would drop as we improved our operation through our extension work. The pick up figures are shown in Fig. 3. Incidentally, our city delivery costs curve has paralleled this pick up costs curve, while the average delivery costs curve has not fallen so sharply because of the rural work.

In carrying out our extension program and cutting our costs we have necessarily spent more money than if we had not undertaken this work. However, we have secured a very handsome return on the investment. The $6200 that we spent on our extension routes in the three years represents 2510 truck hours. This sum is made up of 2510 hours of fixed overhead at 50 cents per hour, or $1,255; 2510 two-man truck crew hours at $1.00 per hour, or $2,510; plus the operating costs which are the remainder, or $2,435. In other words, by spending this $2,435, we saved $3,765 (fixed charges plus labor) which we were already spending and which would otherwise be lost. Each dollar we spent brought back $1.55. When we deduct the dollar we actually spend, we have a net saving of 55 cents. Fifty-five per cent interest on our investment is high enough to be worth working for. On top of this we are getting dividends in the form of doing our own work for less than we formerly paid others to do it for us.

Idle equipment is costly. When a truck stands still it does not require gas, oil, repairs, et cetera, but that old fixed overhead goes right along. We figure that if our equipment loses an hour a day, we lose the profit on $500 business. Yet, if we had merely kept our equipment moving over our original territory, we should have been just as badly off. In fact, we should have been actually wasting money, as we should have been "making work" really to keep our trucks on the streets. Our only solution was to increase the tonnage, which we did by extending our delivery territory. When we come to figure our savings, we find that they are more than we realized was possible with only three pieces of equipment with which to work.

Because of the inherent nature of truck costs with their many variables, it is difficult to figure accurately our savings of the past period. However, we can readily estimate our savings for the year 1934. We shall assume that in 1934 we shall handle a tonnage equal to the average of 1931, 1932, and 1933. Reference to the charts, Fig. 2 and Fig. 4, shows a pick up cost drop of at least three cents a hundred and a delivery cost drop of eight cents. Our Volume Records give an incoming tonnage average of six and one-half million pounds and an outgoing tonnage average of five million pounds. With our pick up cost drop of three cents on that tonnage, we shall save $1,950 there; and with our eight cent delivery cost drop on the outgoing tonnage, we shall save $4,000. Now that we have learned the value of keeping our trucks moving, we will certainly pick up that extra $50 to make our yearly savings an even $6,000.

Viscosity Affects Oil Use But Engine Speed is the Real Hog

COLD weather starting and winter lubrication, those devilish twins that annually plague fleet operators, are having their tails cut off and their pitchforks dulled by scientific developments. The man who is responsible for abating this related pair of nuisances and thereby earning the gratitude of operators, is H. C. Mougey (pronounced Moo-zhay, just in case you should accost him sometime to pay your respects), chief chemist of General Motors Research Laboratories.

An inkling of his accomplishments in the field of winter lubrication was revealed by Mr. Mougey (get it right now) at a recent meeting of the Philadelphia Section of the S.A.E. His talk centered chiefly around the new standard engine oils for winter use—10 W and 20 W, for whose adoption he was largely responsible.

Mr. Mougey stated that a fleet of cars had been sent up to Regina, Saskatchewan, in order to study problems of lubrication under severe winter conditions. During the period of the tests the temperature averaged zero and varied roughly between plus 45 and minus 45 deg. At one time there was a drop of 66 deg. in 36 hours and at another, 60 deg. in 14 hours.

Graphic records of cranking speed vs. time under cold weather conditions showed that if the engine is cranked for a considerable period without firing, the cranking speed is likely to increase, which is due to the oil on the cylinder walls becoming diluted with unvaporized fuel. This increase in cranking speed usually is of little benefit, however, because during the cranking period the manifold becomes loaded, and the mixture then is so rich that it will not fire.

Mr. Mougey cited a number of authorities as to the minimum cranking capacity required to assure starting in cold weather. P. J. Kent, chief electrical engineer of the Chrysler Corporation, had said the starter must be capable of turning the engine over at 40 r.p.m. with crankcase oil showing a viscosity of 6000 seconds at 0 deg. F. According to C. M. Larson, supervising engineer of the Sinclair Refining Co., the starter should crank the engine at 35 r.p.m. with oil of 18,000 viscosity in the crankcase, which corresponds to a viscosity of 30,000 for new oil. According to another authority the cranking speeds should be between 20 and 40 r.p.m. with oil of between 12,000 and 26,000 viscosity. The main reason we have had increased starting trouble in recent years, Mr. Mougey said, is that we have not used as light oils as we should have. It was to remedy this situation that the new engine oils 10 W and 20 W were adopted.

A chart was thrown on the screen showing the variation in fuel characteristics during the period 1920-1934. The volatility (as represented by the 10 per cent point) gradually increased until a few years ago, since which time it has remained substantially constant. On the other hand, the potentiality for crankcase-oil dilution, as represented by the 90 per cent point, remained substantially constant until a few years ago, when it began to decrease. From this the conclusion was drawn that whereas in former years we could depend upon the viscosity of the crankcase oil being rapidly reduced by unvaporized fuel, this is no longer the case, at least not to the same degree.

The 10 W and 20 W oils replace the former S.A.E. 10 and S.A.E. 20 oils which had viscosity ranges of 90 to 120 and 120 to 185 Saybolt-Universal seconds at 130 deg. F. Mr. Mougey said there was an inconsistency in specifying the viscosity limits for these oils, which are to be used at low temperatures, at 130 deg. F., because, owing to the difference in temperature coefficient of oils of various provenience, an oil which is within the viscosity range of S.A.E. 10 at 130 deg. may be more viscous at zero degrees than another oil which comes within the S.A.E. 20 range at 130 deg. For this reason the viscosity limits for 10 W and 20 W oils, which are intended primarily for cold weather use, are specified as at zero deg. F.

Some anxiety had been expressed as to the ability of the new winter lubricants to provide efficient lubrication

THE following conclusions developed by Mr. Mougey deserve emphasis:

1. The increase in starting troubles in recent years is chiefly due to the fact that we did not use oils that were light enough.

2. Whereas in former years we could depend upon viscosity of the crankcase oil being rapidly reduced by unvaporized fuel, this is no longer the case, at least not to the same degree.

3. Oil consumption is influenced more by engine speed than viscosity, this applying to both light and heavy oils.

And, as a tip to operators, addition of lard oil to crankcase oil is beneficial in running in new engines.

H. C. MOUGEY

under hard-driving conditions. Mr. Mougey set at rest any doubts on this score by mentioning that Ab. Jenkins, when making his record-breaking drive of 25 hours on the Salt Lakes of Utah, used S.A.E. 20 W oil in the engine of his car, the use of this oil having been decided upon after it had been found that it was possible to get 3 m.p.h. higher speed with it than with S.A.E. 30 oil. If the oil served satisfactorily in this engine, which was driven "all out" for long periods, it certainly should give adequate lubrication in engines that are driven under ordinary conditions.

The safe temperature and viscosity limits, Mr. Mougey pointed out, depend on the composition of the bearing metal and the oil, on design, and on operating conditions. Babbitt begins to crumble at 400 deg. Fahr. and the temperature of the bearing therefore must be kept below this point in order to prevent failure. Ordinarily there would be a difference of 100 deg. between the temperature of the bearing and the temperature of the crankcase oil, which would reduce the safe limit for the latter to 300 deg. A slight margin should be allowed even on this limit, and Mr. Mougey exhibited a chart on which the minimum safe viscosity of the crankcase oil was plotted as a function of the maximum oil temperature, according to which the minimum safe viscosity is about 35 seconds and the maximum permissible oil temperature, 280 deg. This would indicate that it is perfectly safe to use 10 W and 20 W oils in winter time. Confirmation of this result was furnished, moreover, by the findings of a Committee on Cylinder Wear of the Institution of Automobile Engineers which diluted crankcase oil with 90 per cent of kerosene without finding any appreciable increase in the rate of wear.

Numerous charts were exhibited showing the relation between oil viscosity, engine speed and oil consumption. In practically all cases the consumption increased very rapidly with the speed, this applying to both light and heavy oils. Also, the consumption was always greater with the lighter oils, but the difference in the rates of consumption of light and heavy oils respectively varied remarkably with different engines. In cars in poor repair the light oils were found to give very nearly the same mileage as the heavier oils, though the expectation of a greater mileage is usually the reason for preferring the heavier oils. Engine speed has a much greater effect on oil consumption than oil viscosity. In one series of tests, when the car speed was increased from 30 to 55 m.p.h. the oil mileage decreased from 4,000 to 580 miles per gallon. This ratio of 6.9 to 1 was the average from a considerable number of cars, the lowest being 2.3 and highest 19.8.

Another advantage of the lighter oils is that with them bearing lubrication starts sooner after the cold engine has been started. Charts of engine characteristics thrown on the screen, taken while using 10 W and S.A.E. 30 oils respectively, showed that the horsepower and torque were greater with the former, while the specific fuel consumption and the friction horsepower were lower.

An addition of 10 per cent of lard oil did not change this relationship between the characteristics obtained with 10 W and S.A.E. 30 oils respectively.

In the discussion following the talk Mr. Mougey explained that the initials S.A.E. were not applied to the new oils because it was desired to subject them to a period of trial first, and that the letter "W" stood for Winter.

In reply to another question, the author stated that additions of lard oil were beneficial in running in new engines. Such engines, if a little stiff, can be worn in more quickly and with less danger if a little lard oil is added to the mineral lubricant. Later on it is difficult to show any advantage in lard oil additions in the average engine.

What's Back of the Come-Back of the Camel Back

(Continued from page 20)

course is the horizontal-opposed piston type engine, either gasoline or diesel, which might be typified by the flat 12-cylinder gasoline engine introduced a year ago by The White Co.

Another rather novel design is the crankless diesel introduced at the last motor boat show by the Sterling Engine Co. At present this engine is built in the form of a marine power plant, but very soon it is expected to be built for installation in trucks.

One rather interesting construction is suggested by the Hall-Scott engine-on-side design which was first used on a 40-passenger A.C.F. bus last year. This engine, like the White horizontal opposed piston type, is mounted under the frame with all accessories on the under side where they can be readily accessible. It can be serviced completely over an inspection pit. The engine must be installed back of the front springs because of its width. This simplifies the cab construction as the cab can now be mounted directly on the rails in a normal low position requiring little, if any, insulation against engine heat.

As a practical matter the selection of the chassis, wheelbase, etc., should be viewed in the right light by the purchaser and engineer. All engineering is a compromise and the new construction is no exception. On the basis of preliminary calculations you may find that a certain wheelbase, for example, is needed to produce the desired distribution of 1/3-2/3.

The reasonable thing to do is to select the nearest standard wheelbase that is available in production. This is not only reasonable and economical but amply justified by engineering considerations.

• *Future Possibilities*

What the future holds is justly a matter for conjecture being hedged about with many variables, not the least of which is a guess as to the probable trend of State legislation. But there is an interesting possibility. We find that all the activity pictured above is confined to a class of vehicles representing only 1.36 per cent of total truck production. Wouldn't the "close-coupled" construction be of benefit in some of the lighter truck classifications?

The White Co. seems to have made a big stride in that direction with the 701 and 702 series of 1¼ to 1½-ton and 1½ to 2-ton capacity respectively, introduced a few months ago. These jobs embody a modified construction with the cab moved forward so that the engine projects into the cab about 9 in. The C-A dimension, back of cab to center of rear axle, runs about 9 to 14 in. more than for conventional vehicles of the same wheelbase.

When this dimension is utilized correctly, you get a load distribution of approximately 1/3-2/3. This makes a more pleasing looking vehicle and results in better loading of the tires. In fact in some cases it makes possible a reduction in tire size for the same rating due to the reduction in load on the rear tires.

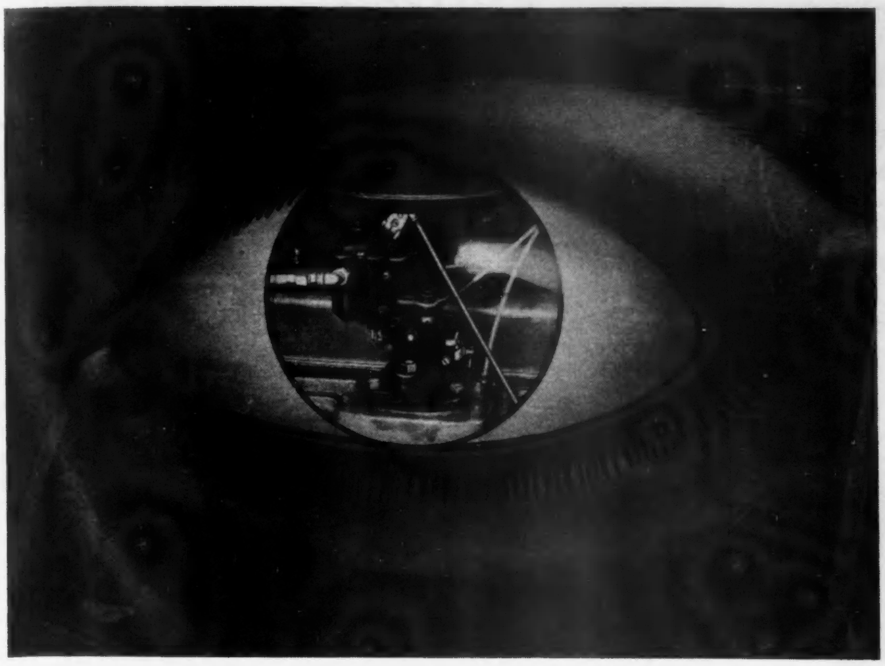
Look to the Carburetor

(Continued from next page)

up to date, enabling them to be operated at a profit, by utilizing this new equipment. Vehicles operating under conditions which may have changed greatly from those for which the trucks were originally designed, can in many cases, be materially improved in performance by making use of the new model carburetor units.

In certain kinds of service, a large amount of dirt and foreign material is drawn into the carburetor, necessitating frequent carburetor overhauls and cleaning. In such cases, the sealed and balanced carburetors, ready for quick installation, are of obviously great advantage. The moderate added cost which this type of replacement entails, is soon more than made up by the lengthening of the periods between cleanings.

Serious consideration before deciding which of these two courses to follow, often results in a considerable saving to the fleet operator.



A FEW thoughts on a subject that is a mystery to many fleet operators and many in the trade, and which will help to determine when to rebuild and when to replace a carburetor.

By A. H. Winkler, Chief Service Technician, Bendix Stromberg

Look to the Carburetor If You Are Looking for Economy

THE subject of carburetion is still somewhat of a mystery to a great many commercial motor fleet operators. The lack of accurate information on this subject has often resulted in the cost of vehicle operation per ton-mile increasing after a carburetor unit has become worn and out of adjustment, despite the fact that there had been no change whatever in operating conditions.

There are two means of keeping operating costs down through routine attention to the carburetor unit. The first is, cleaning and rebuilding the original unit; the second is, replacing it with a carburetor of later and more efficient design. Which one the fleet operator should choose depends largely upon the type of service in which the vehicle is operated. The following is a brief outline of just what the two terms *Rebuilding* and *Replacing* mean.

When a carburetor has been in service over a period of months or years an accumulation of dirt, sand, grit and corrosion necessarily collects around the various metering holes and valves, causing an irregular and altered flow through the carburetor. This can result in only one thing—increased fuel cost per ton-mile.

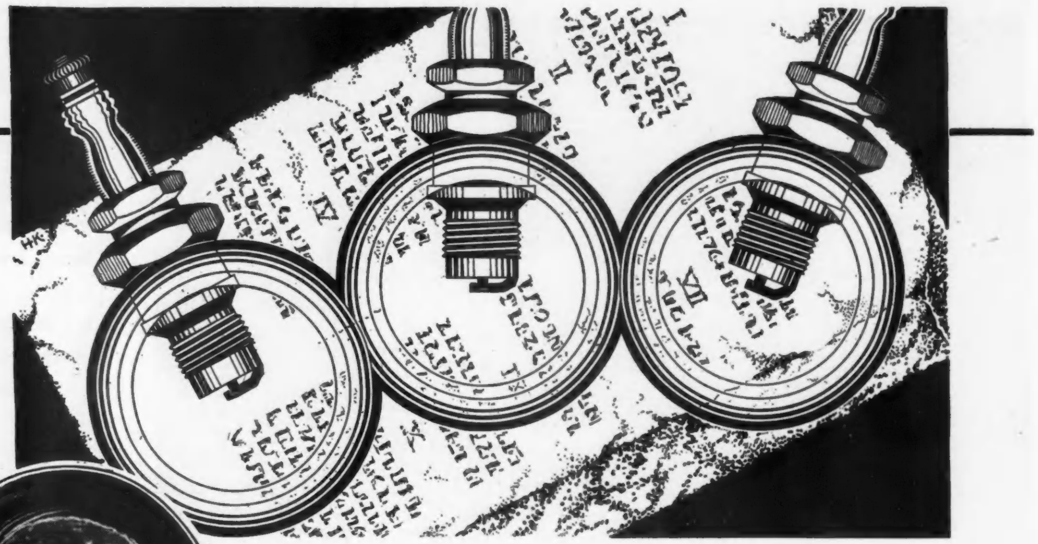
The thought naturally arises in the fleet owner's mind that if the fuel is retarded by partly plugged holes, less fuel is passed through the carburetor and more economy should result. This is not true, however, because after a certain point is reached in "leaning-down" a carburetor, the throttle must be opened further to allow more fuel to enter the cylinders in order to produce the same amount of power. This fuel is not burned efficiently because of the great excess of air present.

Mechanical wear of carburetor parts also takes place. Throttle shafts, and valve faces and seats, are subject to severe punishment, because it is through the carburetor throttle that the truck driver changes the speed of his truck. The effects of this wear are shown by decreased mileage and difficulty in satisfactorily idling and starting the motor.

It should be the policy of the carburetor manufacturer to factory-rebuild worn carburetor units in such a manner that they are practically as good as when they originally left the factory. During the rebuilding process the carburetor must be completely taken apart, even to the smallest plug, and each part inspected separately before being put through a cleaning process. After the parts are cleaned, the various valves, bushing and metering holes must be checked for wear or defect, and replaced with new parts where necessary. When the carburetor is reassembled it should be pressure-tested on a special apparatus, so that any chance leaks may be found, and final adjustments made, before the instrument is returned to the truck operator and again put into service.

As engineering skill has progressed from year to year, new designs have been developed to improve the performance and economy and lengthen the time interval between these cleaning and rebuilding periods on any carburetor installation. Old and apparently obsolete carburetors may sometimes be brought

(Continued on Page Opposite)



Oxides deposited on the insulator are good conductors of electricity at high temperatures and, in effect, short circuit the plug

Maintenance Men: Know Thy Spark Plugs!

A Commandment for Those Who Want to Get the Most Out of Engines

"*SOME day we hope you fellows in the maintenance field will understand that a spark plug has something else to do besides give you a lot of trouble, and it will give a lot less trouble if you try to understand what it is supposed to do.*"

We are quoting here from a talk by Alex Taub, chief of the engine section, Chevrolet engineering department, before a recent session of the Metropolitan Section Society of Automotive Engineers.

Mr. Taub did not elaborate on the statement at the time, but there is plenty of truth in it. A spark plug can and will give trouble if it isn't the right one, or if it isn't looked after. On the other hand the spark plug isn't always to blame for some of the troubles credited to it.

Among the things which sometimes may be traced to spark plugs, are the following:

1. Hard starting.
2. Loss of power at high speeds.
3. High fuel consumption.
4. Missing at low or idling speeds.

Obviously there can be many possible causes for any of these, but it does seem that since spark plugs are so easily accessible, are so simple to clean, adjust or replace that at least that one possible source of trouble could be guarded against. There are really only a few things that can be wrong with a spark plug.

One group of troubles arises from using the wrong type or length of plug, or a plug which is either too hot or too cold for the particular engine, and the other group comes from incorrect spark plug care.

Of the first group, the engine manufacturers, working together with the spark plug manufacturers, have scientifically determined everything except the matter of sensitivity to temperature for varying operating conditions. It is quite important in some engines just how far the gap is from the shoulder of the plug. Given two plugs of the same general type, a "long" plug may work better in one make of engines, a "short" plug in another make. By working better we mean the development of maximum power or torque, together with good idling characteristics and best fuel economy.

In many engines the position of the gap with respect to the inner surface of the combustion chamber is highly important. When fuel enters the chamber, particularly at low speeds, the density of the mixture is not even throughout the chamber—you will have layers of thin and heavy mixtures, called "stratification" by engineers. Engineers explore the chamber near the spark plug to find if, or how far, the plug should extend into the chamber so that the spark will occur in a layer of dense mixture—insuring more complete combustion by proper ignition of the charge.

To illustrate the point, Fig. 1 shows a chart of fuel consumption in miles per gallon for the same engine, used in a low-prced truck, at varous road speeds from 20 to 55 mles per hour, the only difference between the operating conditions being in the matter of spark plug length. The solid line is for plugs which extended ⅜ in. farther into the combustion chamber than the plugs which gave the dotted line. In another make of engine the condition might be reversed.

By Athel F. Denham

C. C. J. Detroit Editor

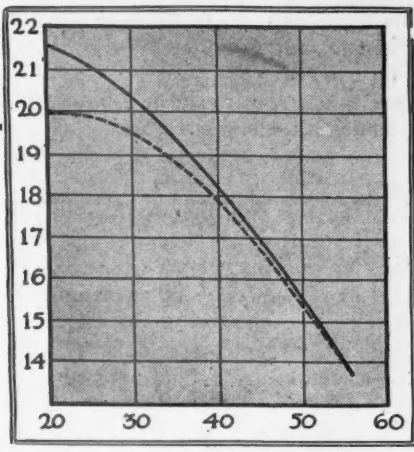
The reason for this difference in fuel economy of course is incomplete combustion—caused by either incomplete combustion (partial missing) or complete misfiring in some of the cylinders occasionally. This missing will not be noticeable necessarily to the driver; at the worst it might come to his notice only in the form of a very slight increase in engine roughness. If soft rubber mountings are used, even this symptom might not show up. At any rate the best way to avoid fuel and power losses from this source is to be sure the spark plugs used are those specified by the factory, where engineers have taken weeks to determine the best position.

Next there is the matter of whether the plug is too hot or too cold. Perhaps a word of explanation is in order. A spark plug at best is a compromise between best idling and maximum torque operation. As the throttle on an engine is opened the spark plug temperature increases. If the spark plug electrode does not cool rapidly enough the high temperature of the spark plug will cause pre-ignition.

On the other hand if the plug is designed for rapid cooling, it may cool too fast when the engne is idling or running under light load, causing fouling. Fouling due to carbon deposits not being burned off is due to a plug which runs too cold.

The difference between a hot and a cold plug is generally only a matter of the distance from the tip of the insulator to the seat of the insulator in the metal shell—the longer the distance other things being equal, the "hotter" the plug.

Spark plugs that come with new engines generally lean toward the "hot" side. All new engines pump oil to a



These curves show the variation in fuel consumption in an engine resulting merely from substituting a plug ⅜ in. longer from shoulder to gap than standard. In another engine the same effect might be obtained by substituting a shorter plug. The graph reads m.p.g. along the side and m.p.h. along the bottom

greater or lesser degree before the rings are properly seated, pistons and cylinder walls worn in. Moreover many people use oil in gasoline for breaking-in purposes. To prevent fouling of the plugs during the break-in period, when engines are generally run at comparatively low speeds also, engineers provide a slightly hotter plug than would be desirable when the vehicle is later operated under considerable loads and at relatively high speeds.

For door-to-door delivery service on the other hand—and other services where the engine is seldom run at high speeds, or is idling a good portion of the time—an even hotter plug than is recommended by the factory may occasionally be necessary. Factory standard plugs are designed, as we have said, as an effective compromise for "average" service. Operating conditions change the requirements frequently. However, in changing from a hot to a cold plug or vice-versa, care should be taken that the plugs are of the same length—so that the position of the gap in the combustion chamber is not changed.

So much for plug selection. Far more

Tips on Spark Plugs

• Re-gapping should be done with a feeler gage because it is a precision operation.

• Avoid breaking the insulator by making all re-gapping adjustments by bending the *side electrode only*.

• If plugs are fouled, don't be content with cleaning them—look for the source of the trouble.

• Spark plugs should be re-gapped every 3000 to 5000 miles. The gap gradually widens after several thousand miles normal service. If it widens quickly and unnaturally the wrong type of plug is being used.

• Gap position in combustion chamber should be according to manufacturer's recommendation for best performance. Use correct length of spark plug.

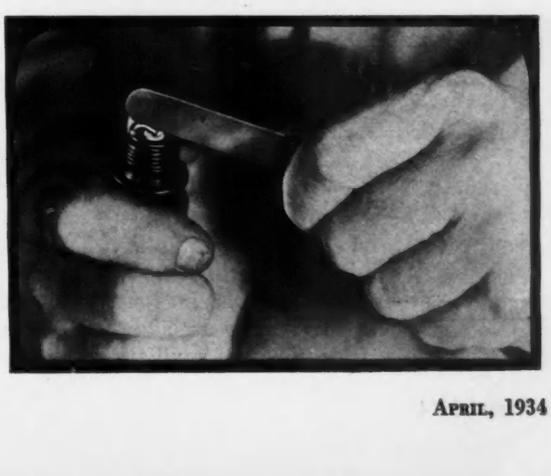
• The recommended gap setting is best for average service. In case of a bad idle, or hard starting, it might be necessary to use a wider gap—not more than ten thousandths wider. A wider gap requires more frequent cleaning for consistent service. Gaps should never be adjusted narrower than specified.

• Select hot or cold type of spark plug to give best operating temperature. The type should be such as not to cause pre-ignition or too rapid deposits of oxides when the engine and accessories are in good mechanical condition. For low speed service the plug should be hot enough to prevent accumulation of carbon and soot.

• Keep the plug in condition by periodic cleaning and re-gapping, then if troubles develop, you know you can look elsewhere for the cause.

Left — Pre-ignition may cause blowby between the insulator and shell. It can be eliminated by using a cooler plug

Right—Re-gapping is a precision operation. Don't guess—use feeler gage



important is the question of proper care of spark plugs. Here two factors mainly are important: the gap width, and the amount of coating on the insulator, forgetting such obvious items as cracked insulators, etc.

In one factory a group of engineers takes about three weeks to determine the correct gap width for its standard spark plugs every time a new model is brought out. This may seem rather ridiculous in view of the fact that spark plug gaps in the field are more often adjusted, if at all, entirely without the use of feeler gages, or reference to factory recommendations. Yet the width of that gap plays an important function in the operation of the engine.

Some engineers claim that a ten-thousandth of an inch error in gap width might in some cases produce a 5 to 8 per cent loss in fuel economy. Whether or not this is correct, both too wide or too narrow a gap will give trouble eventually in some form or other.

Ignition systems are merely a means of transferring energy from the battery into a spark at the correct instant. A given ignition system can supply just so much energy at the spark plug and no more. Remembering that, and considering that the wider the gap the more energy it requires to make a spark jump that gap, and the faster the engine operates the less effective the ignition system, it can be seen that if the gap is wide enough the spark won't jump at all or at least will be very weak—causing mis-firing at high speeds.

A better illustration perhaps is the fact that if instead of twenty-thousandths of an inch, the gap is forty-thousandths wide, that would be equivalent to difference between one battery and two batteries in series. The wider gap would require the two batteries to give just as effective a spark.

Too narrow a gap on the other hand may cause bad idling and hard starting. In this case the spark itself may not be sufficiently hot or sufficiently long to produce proper ignition of the fuel and air mixture in the combustion chamber. Too narrow a gap might also cause mis-firing at high engine speeds in some engines by not properly igniting the mixture.

It is not likely that spark plug gaps will be found too narrow in service unless they have been set that way in adjusting the gap. They may frequently be too wide, however. There is a normal "wear" of electrodes at the gap, and in addition there may be burning of the electrodes due to high temperatures. It is highly recommended that for maximum economy and consistency of operation, spark plugs should be re-gapped whenever they are cleaned.

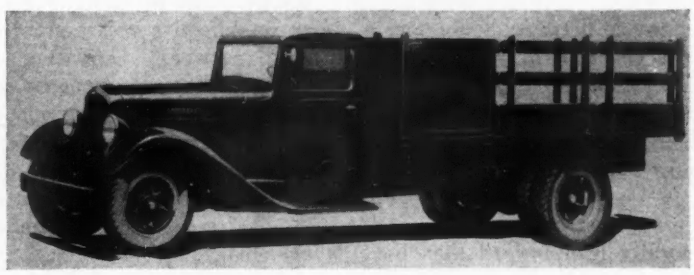
That brings us to the last but perhaps most important factor contributing to spark plug troubles—deposits on the center insulator. These deposits may be of various types: there may be oil from oil pumping, etc.; there may be carbon deposits which have not been burned off. The latter, if present, demonstrate that the plug used is too cool in operation.

Then there are the oxides which deposit from the fuel burned, and in some cases special fuels leave additional forms of chemical deposits on the plug. All of these are conductors of electricity and have the habit of increasing in conductivity as their temperature is increased. Being conductors, they to some extent "short-circuit" the plug and rob it of some of the energy derived from the ignition system. At high engine speeds, when spark plug temperatures are high, this may cause mis-firing—again of a nature which cannot be readily detected by the operator of the vehicle. This type of mis-firing, which may cause a loss in fuel economy of 10 per cent or even more at times, is particularly hard to notice. What happens is the spark plug mis-fires a couple of times—during this period the temperature in the combustion chamber, and that of the plug, drops—the coating on the insulator cools off, loses its conductivity, and again there is sufficient energy for the spark to jump across the gap. The cycle then starts over again.

It will be seen incidentally that the wider the gap the smaller the amount of coating on the plug necessary to cause short-circuiting and mis-firing.

The best answer to this problem is frequent cleaning of the insulator. An insulator normally is white. If it has a reddish brown color, or if it is glassy, or blistered, it has a coating of oxide even though that coating isn't apparent in any other way. It is a good policy to clean spark plugs about every 3000 to 5000 miles of operation. If the rapid appearance of these coatings is a chronic conditions of the engine, it is possible that the plug may be too hot, for the higher the temperature the more readily these coatings form. If the substitution of cooler plugs doesn't solve the problem, the trouble is probably in the ignition or intake system of the engine, including the carburetor.

Federal's New 2-Ton Lists at $845



FEDERAL Motor Truck Co. has announced a new 2-ton truck at $845. Known as Model 18X, it has a maximum gross rating of 11,000 lbs. In appearance, in the number of available wheelbases and in the matter of powerplant, it is similar to the 1½-ton 15X described on page 36 of the March issue.

Standard tires are 6.00/20 six-ply single front and dual rear. The standard 137-in. wheelbase chassis weighs 3800 lbs.

While the Hercules JXA is standard, a larger engine (JXB) of 263 cu. in. displacement is optional at extra cost.

The fish belly frame has a maximum depth of 8½ in. Flanges are 2⅞ in. wide and the thickness of the steel is 7/32 in. Front springs are 38 in. long by 2½ in. wide. Rear springs are 50 in. long by 2½ in. wide. Five leaf auxiliary springs 41 in. long by 2½ in. wide are standard equipment. All spring eyes are rubber bushed and require no lubrication.

A 4-speed transmission is mounted in unit with the engine. There is an opening on the right side of the transmission providing for a standard power take-off. The transmsision ratios are: First speed 6.40 to 1; second speed 3.09 to 1; third speed 1.69 to 1; fourth speed 1.00 to 1; and reverse 7.82 to 1.

The rear axle is full floating bevel drive type with a straddle mounted pinion gear. Standard gear ratio of the rear axle is 6⅞ to 1 with 6⅜ to 1 optional. Universal joints are of the roller bearing type which require lubrication only at very infrequent intervals. A single propeller shaft is used on the standard 137 in. wheelbase chassis, while two shafts with a self-aligning center bearing are provided on the longer wheelbases. Large, powerful hydraulic brakes of the internal type have a braking area of 260 sq. in., 15 in. x 2¼ in. F., 16 in. x 2¼ in. R. fully weather proof. All brake drums are of cast alloy iron.

This shows IHC Model C-1 with roomy, attractive cab and all-steel pick-up body

IHC Builds New Half-Ton in Own Plants

Chassis of 113-in. wheelbase Model C-1 lists at $400 with shock eliminators and bumper $25 extra. Front-end changes greatly improve appearances.

A NEW half-ton truck, improved in appearance and completely built in its own plants is announced by the International Harvester Co. of America. It is a 113-in. wheelbase job which will be known as the C-1. The chassis will list at $400 f.o.b. factory. With shock eliminators and bumper the list will be $425. Body prices are not yet available.

In appearance the new model is distinctive and decidedly pleasing. A stream-lined hood and cowl, V-type radiator and valanced fenders all contribute to its attractiveness. The radiator shell is finished in the same color as the hood and cowl and trimmed with a polished stainless steel moulding and satin-finished aluminum grille.

The cowl is furnished as standard equipment, less the windshield. The latter is sloping and hinged at the top. The cab is roomy, comfortable and insulated against heat and sound. It is of composite wood and metal construction, with a one-piece, deeply-crowned steel roof.

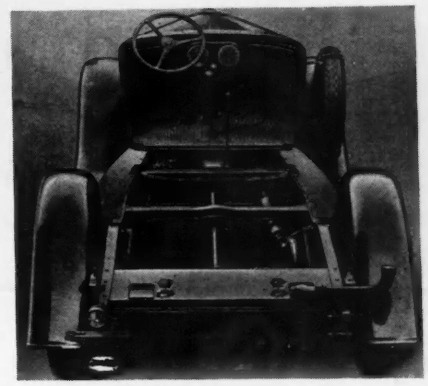
The six-cylinder L-head engine, with 3 5/16-in. bore and $4\frac{1}{8}$-in. stroke, has a displacement of 213 cu. in. Brakehorsepower is 78 at 3600 r.p.m., and 148 lb. ft., of torque are developed at 800 to 1000 r.p.m. The precision-type main and connecting rod bearings are removable and replaceable. Hardened exhaust-valve seat inserts are employed and the downdraft carburetor is fitted with an air cleaner.

The frame is sturdy and well reinforced by gusseted cross members. Frame dimensions are $5\frac{3}{4}$ x $2\frac{1}{4}$ x 9/64.

Other chassis features include cam-and-lever steering, roller bearing anti-friction type universal joints and internal-expanding brakes of the equal action cam type.

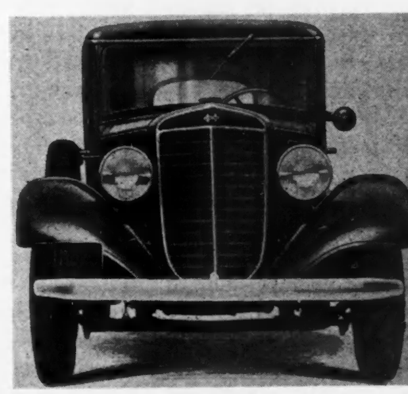
The all-steel pick-up body is $47\frac{1}{8}$ in. wide and 66 in. long inside. Side panels 13 in. high are provided with 6-in. flare boards. Stake pockets are provided so that a special canopy top may be mounted.

The panel body is 6 ft. long, 52 in. high inside and 55 in. wide inside at the belt.

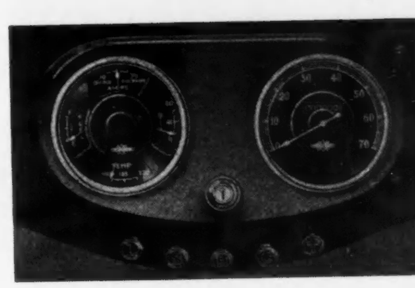


Plan view of the C-1 chassis

The C-1 with a 6-ft. panel body mounted on the 113-in. wheelbase



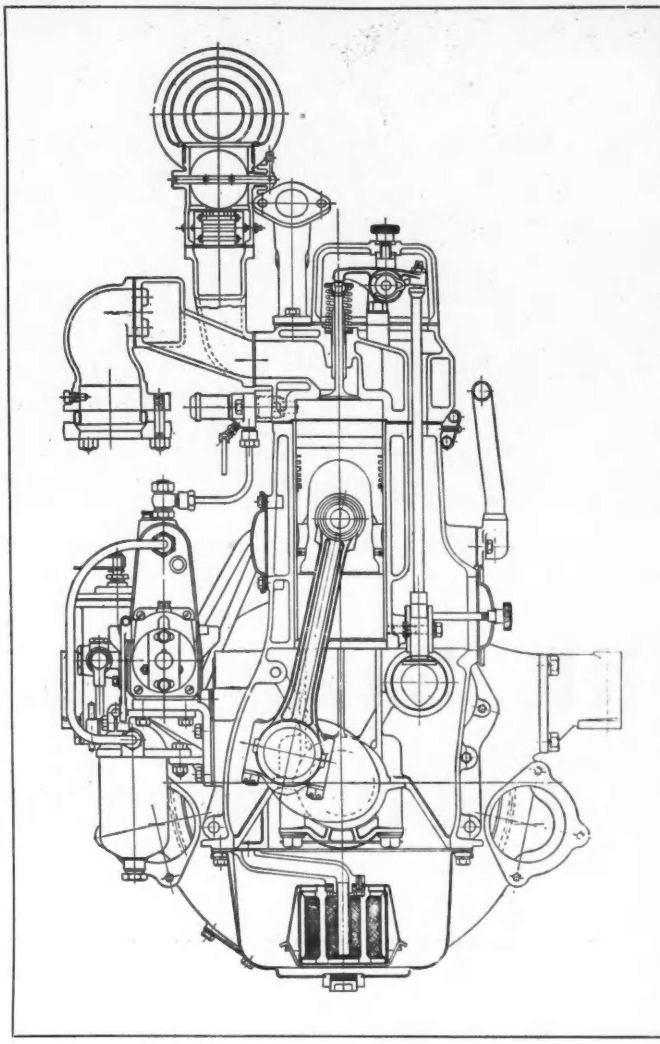
The V-type radiator has a satin-finished aluminum grille



Airplane type instruments and conveniently located controls feature the C-1 instrument panel

Buda Breaks Out With Full Diesel in Two Sizes

80 and 90 hp. jobs differ only in bore. Use Bosch fuel injection



This cross-section of the Buda M.A.N. diesel engine shows the location of the injection pump and nozzles

THE Buda Co., of Harvey, Ill., has a line of heavy-duty, six-cylinder automotive diesel engines, built under license from the German M.A.N. company. Both sizes of engines have a 5½-in. stroke, with bores of 3 13/16 and 4 in., respectively, for piston displacements of 377 and 415 cu. in. Both engines are governed at 2000 r.p.m. at which speed the smaller develops better than 80, and the larger above 90 hp.

The engines are of the four-cycle, full-diesel, solid-injection type, using Bosch fuel injection systems. An air storage chamber is incorporated in the cylinder design. These chambers are closed off by a rotating plunger type valve for easy starting when the engine is cold. With the air chambers thus closed off—by means of a sngle lever operating all six valves—compression ratio is 17 to one.

The valves are opened again when the engine has reached its normal operating temperature—that is ,a temperature of 130 deg. fahr. or better—under which conditions it will then be running on a ratio of roughly 13 to one.

These engines show an unusually low maximum rate of pressure rise, which accounts for their relative smoothness of operation and the fact that fairly light weight could be achieved without resort to light-metal engine castings. The only major aluminum alloy part is the cylinder head cover enclosing the overhead air intake and exhaust valves.

The object of operating on a relatively low compression ratio, according to Buda engineers, is to obtain the maximum air supply in the combustion chamber, achieving an increase in turbulence for more effective combustion, thereby increasing the horsepower output and combustion efficiency, as shown by a reduction in the amount of smoke in the exhaust gas.

Best fuel consumption is obtained apparently in these engines in the 1200 to 1600 r.p.m. range. The maximum B.M.E.P. values are obtained in the same engine speed range, although the maximum torque curve is relatively flat from 600 to 1800 r.p.m. The engines do not carry air compressors for supercharging.

Aside from the fuel mechanism the powerplants do not depart widely from accepted good heavy-duty automotive design practice. Blocks are fitted with replaceable dry type steel sleeves clamped in place by the cylinder head. There are seven main bearings of the steel-backed precision, interchangeable type replaceable individually without disturbing the crankshaft.

Connecting rods are rifle drilled for pressure lubrication to the full-floating piston pins. Pistons are of aluminum alloy with piston head design incorporating a transverse specially shaped trough to increase turbulence. There are six rings per piston.

Both intake and exhaust valves are of silchrome steel. Tappet adjustment can be made with the engine running. Valve seat inserts are provided for the exhaust valves. Valve springs can be replaced without removing cylinder heads. Pistons and connecting rods are removed through the top of the block.

Incorporated in the cooling system is a Harrison oil temperature regulator. Lubrication is of the full pressure type throughout including the rocker arm shaft, and governor.

Impeller type pumps for water circulation are mounted on the timing gear cover, and are driven by the camshaft gear. From the pump water goes through the oil temperature regulator, where it divides, part going to a distribution gallery on the cylinder head, the remainder going into the block. Cooling fans are mounted on anti-friction bearings.

The Bosch fuel system is too well known to require description here. Fuel injection nozzles are of the closed pintle type and normally should not require adjustment. Control of the amount of Fuel injected is through a variable cut-off on the injection plungers, the stroke remaining constant. The Pierce governor regulates the amount of fuel directly, the hand "throttle" being connected to the governor.

A variable timing device which regulates the start of injection is provided, but adjustment of this mechanism is not recommended subsequent to shipment from the factory. There is in the system also a Bosch fuel filter, while the air intake is provided with an intake silencer and air cleaner—combined.

$ALVAGE—From a Shop Man's Mail

Sent out by manufacturers of automotive products. The editor will gladly put readers in touch with makers mentioned

A Gassing Eliminator

HOW to eliminate obnoxious exhaust fumes has been a subject for discussion among fleet operators for a long time. To help solve this problem—generally referred to as "gassing"—there is the Doering Gassing Eliminator. It is simple in design and construction. The body is of cast iron and the cam and rollers of hardened steel. It works this way:

When the forced momentum of the engine causes a greater velocity or r.p.m. than idling speed when deceleration takes place, the value of the Eliminator is automatically snapped open by the vacuum in the intake manifold, thus cutting off the fuel supply from the carburetor and permitting free air to be drawn into the engine. When the momentum or the r.p.m. of the engine diminishes to idling speed or until the throttle is again opened, the valve of the Eliminator automatically closes and the engine continues to operate normally.

This device will be sold nationally. We'll put you in touch with the distributor.

A Locking Expander

An expander for curing piston slap in both cast-iron and aluminum-alloy pistons has been announced by Liberty Accessories Corp. It comes in three sizes to equip all cars and many trucks. Installation is made simply by means of a special pair of pliers. A soft steel locking pin prevents the expander from working out of position.

Hydraulic Cylinder Hone

Wagner Electric Corp. is marketing a home set adaptable to drill press operation for honing hydraulic brake cylinders. The set is contained in a steel box with complete instructions. It takes care of brake cylinders from 1 in. to 2 in. inclusive, and lists at $15.50.

Rust-Proofed Clamp

Wittek Mfg. Co. is putting up its Star hose clamp in packages of 10 as well as 100. The clamp is a universal type and fits all hose from 1 in. to 3 in. The clamp is rust-proofed and the bolt and nut cadmium-plated. Catalog sheet and other literature will be supplied.

A Paint-Spray Help

A new, patented fluid cut-off valve, for use with its paint spray guns, has been developed by The DeVilbiss Co. The valve permits the operator to drain the gun of fluid or to blow out and obstruction without disconnecting the gun from the hose, thus increasing production speed.

Brake Lining Cleaner

Armite Laboratories has a liquid cleaner which, applied to brake lining, causes it to lose its glaze. The maker claims this will cause brakes to equalize themselves and give better service. The cleaner comes in a squirt can and is sold on a guarantee basis.

For Hardened Valve Seats

With hardened valve seats coming into extensive use, Albertson & Co. has brought out a Sioux dual action grinder which will grind the hardest valve seats made to a perfect mirror finish. Accuracy is within .001 of an inch without any need for delicate adjustments. The complete grinder consists of a high-speed driver, a grinding wheel holder and a dressing tool.

Heat-Resisting Expander

American Hammered Piston Ring Co. has a piston expander made of Crovanite, which the maker refers to as a "new super-heat-resisting metal." Six sizes take care of all requirements. It can be installed with a screw driver. An exclusive feature is full length expansion of the piston skirt on the thrust side.

Water Pump Packing

Aluminum Industries, Inc., has a new Permite packing for all types of water pumps. It is made of long asbestos fibre filling, with reenforcing lead strands forming a core, which is covered with a tight-fitting case of whip braid. This is pressed to shape and impregnated with a water-resisting lubricant and natural graphite. It is claimed that it will not harden in service and is not affected by any anti-freeze.

Fuel Pump Analyzer

A fuel pump analyzer, developed by the AC Spark Plug Co., combines a flow and pressure test which gives an accurate analysis of a fuel pump under actual operating conditions without removing the pump from the engine. List price is $7.

Atmosphere-Proof Hoist

With no change in prices, an improved spur-geared chain hoist has been brought out by the Wright Mfg. Division of American Chain Co., Inc. All exposed parts are now zinc-coated. Precision ball bearings with integral grease seals support all moving parts and increase efficiency 10 per cent.

Gauges for the Front End

Bear Mfg. Co. has a device for gaging turning radius correctly. It weighs about 10 lb. and is portable. A pair is necessary, one for each wheel.

Bear also has a combination gage which checks both toe-in and camber and which is adjustable to all wheels and fits any tire.

Dual-Type Wrenches

Wrenches which combine two types of openings—box and open end—have been introduced by The Herbrand Co. They are drop-forged from chrome vanadium steel. Both ends have the same size openings. The box end has a 12-point opening.

Oil-Spray Air Cleaner

Industrial Air Cleaner Company has an oil-spray type of air cleaner. The dirt settling compartment is furnished in various sizes to meet requirements.

For Sticky Valve Stems

Kapolene is a lubricating chemical compound furnished by Klemm Automotive Products Co. Added in the proportion of one to three parts to the crankcase oil it prevents congealing at low temperatures, dissolves gummy accumulations on valve stems and piston rings.

We Repeat an Offer

Last month a great many readers wrote in for the valuable publications listed below. We are repeating this free offer. Check any or all of the books and mail the order blank to the Salvage Department, Commercial Car Journal, Philadelphia, Pa.

Please send me the following

Free Books

- ☐ **13. Operators' Tire Handbook**
- ☐ **14. Motor Mechanics' Handbook**
- ☐ **15. Piston Ring Manual**
- ☐ **16. Spark Plug Chart**
- ☐ **17. Executive Thinking**
- ☐ **18. Demountable Body Equipment**
- ☐ **19. Counter & Recorder Catalog**
- ☐ **20. Silent Gear Catalog**
- ☐ **21. South Bend Lathe Catalog**

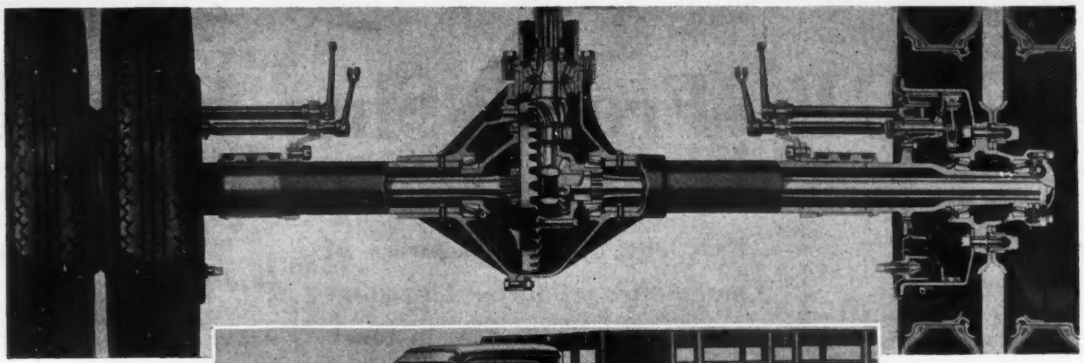
Name . . . .

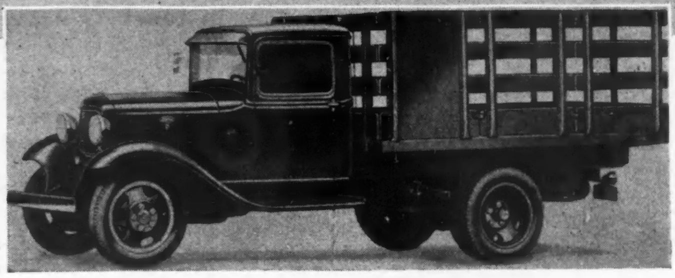
Title . . . .

Firm Name . . . .

Address . . . .

City and State . . . .





Views of the new Ford truck and full-floating axle

Ford Bolsters Its Bid for Truck Volume With Full-Floating Rear

New axle is more heavily constructed with ample torque capacity to handle V-8 output

THE principal features of the new Ford trucks for 1934 include a new full-floating rear axle and a number of changes made to make the V-8 engine especially suitable for truck work. The forward end of the truck has been re-styled with a new chrome-plated moulding around the radiator grille, chrome-plated hood hinge rod and ornament for the radiator filler cap.

The new rear axle is more heavily constructed throughout than formerly with ample torque capacity to handle the full output of the V-8 engine. The pinion shaft is larger with larger bearings and the teeth on pinion and ring gear are wider than in the former ¾-floating axle. The straddle-mounted driving pinion and ring gear thrust plate, two Ford axle features for some years, are continued, the latter with an enlarged surface. The straight type rollers in the straddle-mounting for the driving pinion are now solid, giving them a higher load-carrying capacity than the former spiral flat wire type.

Provision has been made for positive lubrication to the pinion bearings. The centrifugal action of the ring gear pushes lubricant through a passage leading between the two taper pinion bearings. A similar duct acts as a return canal for the circulating lubricant.

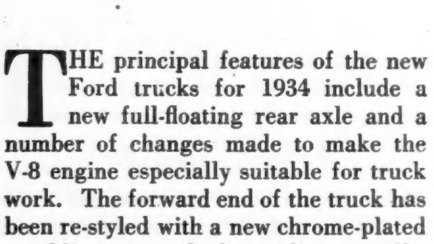
A new design feature is embodied in the differential bearing mounting. The taper roller bearings now are located equidistant from the centerline of the ring gear, thus providing equal distribution of stresses between the two bearings and equalizing bearing wear. The new design also embodies a more rugged conically shaped differential case heavily ribbed inside to decrease deflection of the ring gear and a heavier housing for the differential assembly. To accommodate the full-floating axle shaft, the differential bearings are larger in diameter. The axle shaft tubes are of thicker material and the strength of the spring seat mountings has been increased.

The axle is especially designed for use with dual tire equipment. The taper roller bearings in the wheels are located directly under the load center when this equipment is mounted.

The driving flanges on the axle shafts are forged integral. Where the shafts slip into the differential side-gears 16 spline fittings are used with the shafts upset to eliminate localized stresses.

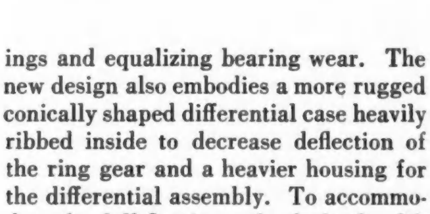
The V-8 truck engine is equipped with the new dual downdraft carburetion sys-

(TURN TO PAGE 68, PLEASE)

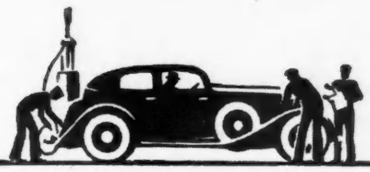


Left—The Ford "floating" connecting rod bearings are now surfaced with a high lead-bronze material

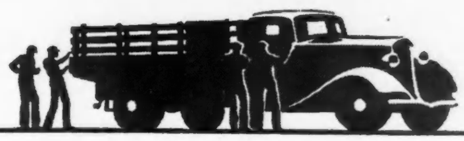
Right—Axle shafts may be readily removed without jacking up the wheels



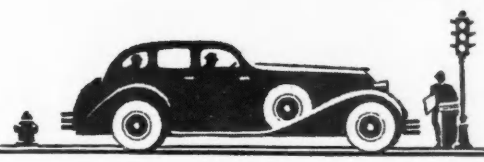
CHOSEN



by 35.7% of all car builders



by 74.4% of all truck builders



by more than a million American motorists!

Lockheed Hydraulic brakes enter their eleventh year of service more firmly entrenched in the respect and approval of American car and truck owners than ever before.

Their principle of permanently, perfectly equalized pressure at all four wheels, their simplicity, their ease of adjustment and the infrequency of any need for it . . . these things have won more than a million American motorists to Lockheed Hydraulic brakes.

Their easy factory installation, their excellent service record and their wide public approval, have gained for these fine brakes the endorsement and adoption by 35.7% of all car builders and 74.4% of all truck builders.

HYDRAULIC BRAKE COMPANY
DETROIT, MICHIGAN

LOCKHEED HYDRAULIC
Four BRAKES *Wheel*

OFFICIALLY SERVICED THROUGHOUT THE NATION BY WAGNER ELECTRIC CORPORATION

Commercial Car Journal NEWS

Truck Output Gains 140%

Truck production figures just released by the U. S. Bureau of Census show a gain of 140 per cent in the first two months of 1934 over 1933. U. S. and Canada output was 93,257 against 37,867. February production was 46,566 units, a gain of nearly 200 per cent over the 15,669 produced in February of last year.

The figures show a substantial improvement in production of trucks of more than two tons, which indicates that heavy-duty types are sharing in the recovery.

Mack May Sell Fords

At the annual meeting of stockholders of Mack Trucks, Inc., A. J. Brosseau, president, said considerable improvement had developed in the heavy-duty truck business. He added that negotiations were proceeding with the Ford Motor Company on an arrangement whereby Ford trucks would be sold and serviced through Mack Trucks branches, but no immediate decision was in prospect. E. R. Hewitt and W. D. Sargent were elected directors.

Groves Gets Autocar Control

Control of the Autocar Co., Ardmore, Pa., has passed into the hands of Wallace Groves of New York City, who, it is understood, acquired 60 per cent of the 200,000 outstanding shares of Autocar stock. Mr. Groves is described as an independent operator with no bank or brokerage connections. At the recent annual stockholders' meeting Mr. Groves spoke optimistically of the opportunities in the truck industry, of the future of the Autocar Co. and endorsed the management and policies of President Robert P. Page, Jr. He was elected to the board of directors.

Senate Gets Truck Bill

Senator Clarence C. Dill (D., Wash.) has introduced in the Senate the bills prepared by Joseph B. Eastman, Federal Coordinator of Transportation, proposing regulation of bus and motor freight transportation (S. 3171) and regulation of water transportation (S. 3172). They have been referred to the Committee on Interstate Commerce.

Dodge Sales Jump 705%

Dealers' retail deliveries of Dodge trucks during the first 11 weeks of 1934 totaled 7400 units, as against 919 units delivered during the corresponding eleven weeks of 1933—an increase of 705.2 per cent. Deliveries for the week ending March 17 alone were 952 Dodge commercial cars and trucks, according to J. D. Burke, director of truck sales.

March White's Biggest Since 1930

Orders received by The White Co. for the first three months show an increase of 150 per cent over the corresponding months of 1933. March was the biggest month for the company since March, 1930, more than 800 orders being received from 60 distinct types of business.

Operators Add Diesels

As an addition to the growing list of fleet operators who have adopted its diesel engine, the Cummins Engine Co. announces that the U. S. Truck Co. of Detroit, has joined the family.

This company recently installed its first Cummins model HA-4 cyl. diesel in a heavy-duty Mack and has placed an order for 12 more.

Pacific Freight Lines of Los Angeles, which has been operating 21 units equipped with Cummins diesels has ordered 50 more. Transamerican Freight Lines of Detroit, with 11 Cummins diesel-powered vehicles, has ordered 20 more.

Reo Shipments Up 335%

Reo Motor Car Co. shipments of speed wagons, trucks and buses during the first quarter of 1934 have been three and one-third times as great as during the first quarter last year, according to Elijah G. Poxson, general sales manager.

Herrington Betters 1933

In the first three months of this year, the Marmon-Herrington company booked more actual business than in the entire 12 months of 1933, reports Vice-President Bert Dingley. All of the orders are for all-wheel-drive equipment. In 1933 the company sold more than six times as many units as in 1932.

Hercules Back on Coast

Hercules Motors Corp. has re-established direct factory representation on the Pacific Coast with the moving of Oliver S. Kelly to headquarters in San Francisco.

Kleiber Handles Studebaker

W. H. Edwards, general manager of the Studebaker Truck Division, announces that Kleiber Motor Co. of San Francisco and Oakland, will distribute Studebaker trucks in nine counties of California. Kleiber will continue to manufacture and sell its heavy-duty diesel-engine trucks.

Ford Passes Underwriters

Sharp reduction in the cost of fire fighting equipment for cities up to 25,000 population was indicated with the announcement that the new Ford V-8 truck had passed all tests prescribed by the National Board of Fire Underwriters and is listed among accepted driving units for a pump capable of delivering 500 gal. of water a minute for an extended period. Ford is the first in its class to pass the tests.

Goodrich Has New Tire

A newly developed truck and bus tire is announced by The B. F. Goodrich Co. Known as the Goodrich Triple Protected Silvertown, it has three new protection features, which the maker designates as Plyflex, Ply-lock and 100 per cent Full-Floating Cords.

AC To Make Bearings

The AC Spark Plug Co. is installing equipment for the production of bronze-lined, steel-backed engine bearings, preparatory to entering the bearing business. Production is expected to start June 1.

Dodge Adds to Truck Staff

Dodge has made the following truck representative appointments: E. F. Drew in the North Jersey district, and W. C. Price in the Scranton district of the New York region; W. C. Pollard in the Evansville district, and J. E. Conley in the Huntington and Columbus districts of the Cincinnati region; M. J. Herold in the Baltimore district of the Philadelphia region; L. F. Turney in the Abilene, San Antonio and Amarillo districts of the Dallas region; E. A. Granroth in the Erie district of the Pittsburgh region.

Ed Lowe on S.A.E. Staff

Edward F. Lowe has been appointed assistant general manager and C. B. Whittelsey, Jr., assistant secretary of the Society of Automotive Engineers.

Ed Lowe, well known to fleet men and truck factory executives, was one of the organizers of the Monarch Governor Co. and pioneered development of the automatic type of governor in the truck field. Later he became interested in K. P. Products Co. as general manager. After K. P. Products merged with Handy Governor Corp., he became vice-president in charge of sales of Handy.

Balser and Jamison Named

Appointment of F. W. Balser and John T. Jamison to the field sales force of the Federal Motor Truck Co., is announced by J. F. Bowman, vice-president in charge of sales.

Herrick Resigns; Reed On

W. C. Herrick has resigned as Mack branch manager in the Cleveland district. Leonard F. B. Reed has been made his successor, with F. V. Fullem, assistant branch manager.

Gilbert Goes to Thornton

Frederick G. Gilbert, former Timken De-

(Turn to Page 68, Please)

COMMERCIAL CAR JOURNAL'S

TRUCK SPECIFICATIONS TABLE

The Commercial Car Journal's Truck Specifications Table is brought up to date in each issue from data supplied monthly by truck manufacturers

KEY TO ABBREVIATIONS AND REFERENCE MARKS

GENERAL

Chassis Price—Chassis price quoted applies to the standard wheelbase and specifications listed. All prices are F.O.B. factory.

***—List price not yet established. Ready next issue.

Tonnage Rating—Where a spread of ratings is given the maximum ratings are for ideal operating conditions and the minimum for extremely difficult conditions; the ranges between are for varying operating conditions.

Gross Vehicle Weight—Is chassis weight, plus body and cab, plus payload. Gross vehicle weight given for a model is based on maximum recommended tire size and not on tires listed as standard equipment.

Chassis Weight Stripped—Includes gas, oil and water and all things included in chassis price. Does not include the weight of cab.

Maximum Brake H. P. at Given R.P.M.—Is actual dynamometer reading without accessories.

Tractors—Unless given the designation N (meaning not available as tractor), all standard models may be assumed to be available as tract rs.

(A) All Torque and Brake Horsepower values listed are based on engine outputs with all Standard Equipment Accessories running and are the same values obtaining with the truck on the road in actual operation.

(N) Not available as tractor.

(T) This designation accompanying a model number indicates vehicle is specifically designed for tractor use only.

c. o. e.—Cab-over-engine design.

(3) **Corbitt**—Larger engines and corresponding auxiliary units provided on all models at extra cost.

(4) **Day Elder**—Model 75—1½ ton—same specifications except price—$945, and larger tire size—B6.00/20 front and DB6.00/20 rear.

(5) **Dodge**—F-61 available as special tractor truck with 146-inch wheelbase with model designation of F-60, at $2645. K-61 available as special tractor truck with 146-inch wheelbase with model designation of K-60, at ***.

(5a) **Dodge**—Model H20, ¾-1 ton, gross vehicle weight 6,000 lb., price $502, has same specifications as H30 except tires which are 7.50/17 and lighter rear springs.

(6) **General Motors**—Models T-18 to T-61 inclusive are also available for export only as coach chassis. Double reduction axles optional in Models T-43, T-43T, T-51, T-61, T-83 and T-95 at extra cost. Trailing type axles available on Model T-95 at price deduction. Optional size engines available on Models T-85, T-85H, T-95, T-110, and T-130 at varying cost.

Gramm—Larger engines and corresponding auxiliary units provided on all models at extra cost when type of service demands. Wheelbases and body mounting dimensions may change to suit special requirements. Double reduction axles available on all models except AX and BX.

Gross weight indicated for each model in the table is the straight rating.

Series CXH is supplied with Hercules JXB engine in Model CXHB and Hercules JXC in Model CXHC.

(7) **Grass Premier**—Eight cylinder engines available on following models: 835 with Lyc. GU at $1515 list; 865 with Lyc. HF at $4230; 875 with Lyc. AE at $5400.

(8) **International Harvester**—A-1, ¾ ton, same as A-2 except less spring leaves and smaller tires.

(9) **Le Moon**—Model 600 available with Lyc. AEC at same cost. Models 701 and 801 available with Waukesha 6SRL at same cost.

(10) **Sterling**—Rocker arm used in place of springs

(*) **Sterling**—These models also available equipped with Cummins Model H Diesel engine.

†**Reo**—Model 1D is the longer wheelbase edition of Model 1B. The frame dimension is 7x2¾x$\frac{3}{16}$. It is furnished at extra cost.

††**Reo**—2J,2K same as 2H except 166 in. wheelbase and price of $1695

††**Reo**—3J same as 3H except wheelbase of 170 in. and price of $2085; 3K same as 3H except 185 in. wheelbase and price of $2155. 3M same as 3H except 205 in. wheelbase.

(11) **Studebaker**—S-2 in 141 in. and 165 in. wheelbases has 6$\frac{11}{16}$ in. frame depth.

(12) **White**—Each model shown is furnished with different specifications for different tonnage ratings.

*—Factory governed speed 2400 r.p.m.

(13) **Marmon-Herrington**—Available with Hercules Diesel engine. Price on application.

(14) **Ford**—Rear axle ratios 5.14 and 6.6 optional on 1½-ton trucks.

(15) **Mack**—Chassis price and weight include cab.

MAKES—ALL

AB—American Bosch.
A LaF—American La France.
AL—Auto Lite.

B—Bendix.
BB—Borg & Beck.
BL—Brown-Lipe.
BO—Bendix front, Own rear.
Blo—Blood.
Bu or Bud—Buda.
BW—Borg Warner
BWs—Bendix front, Westinghouse rear.
C or Col—Columbia.
Car—Carter.
Ch—Chicago.
CI—Ignition by compression.
Cl or Cla—Clark.
Cle—Cleveland.
Co—Covert (transmission).
Co—Covert (clutch)
Con—Continental.
Cot—Cotta Gear.
Cum—Cummins-Diesel

Det—Detroit Lubricator.
DG—Detroit Gear and Machine.
DR—Delco Remy.

Eat—Eaton.
Ei—Eisemann.
En—Governor built in engine
EV—Electro-Vac (gov.) Pierce.

Fe—Fedders.
Fu—Fuller.

Ge—Gemmer.
GO—G. & O.

Ha—Handy (governor).
Ha—Hannum (steering gear).
HaS—American Car & Fdry.
Her—Hercules.
Hr—Harrison.
HS—Merchant & Evans (clutch).
HS—American Car & Fdry. (governor).

Jac—Saginaw.
Jo—Jones.

KP—Handy.

L—Lockheed.
Li—Lipe, W. C.
LN—Leece Neville.
Lo—Long.
LO—Lockheed front, Own rear
LW—Lockheed front, Wisconsin rear.
Lyc—Lycoming.

Mc—McCord.
Ma—Marvel.
ME—Merchant & Evans.
MM—Mechanics Mach.
Mo—Modine (radiator).
Mo—Monarch (governor).
My—Mallory.

NE—North East.
No—Not supplied.
ns—No Standard.
O or Ow—Own.
Op or Opt—Optional.
Pe—Pierce (governor).
Pe—Perfex (radiator).
PS—Peters & Snead.
RB—Robt. Bosch.
Ro—Rockford.
Ros—Ross.
Sc—Scintilla.
Sch—Wheeler-Schebler.
Snu—Shuler.
SpB—Spicer and Blood.
Spi—Spicer.
Ste or St—Sterling.
Str—Stromberg.
Til—Tillotson.
T or Tim—Timken.
TWH—Timken Wisconsin Herrington
WG—Warner Gear.
Wa—Waukesha (governor).
Wau—Waukesha.
W or Wis—Wisconsin.
Ws—Westinghouse.
Yo—Young
Zen—Zenith.

BRAKES—SERVICE

Location

2—Two Wheels, rear only.
2/4—Two-wheel brakes effective on all four wheels through driveshaft.
4/6—Brakes on four rear wheels effective on all wheels through driveshaft.
T/4—Brake on transmission effective on all four wheels through driveshaft.
4—Four Wheels, front and rear.
4r—Four Wheels, rear only.
6—Six Wheels, front and rear.
J—Jackshaft.
P—Propeller shaft.

Type

I—Internal.
X—External.

Operation

A—Air.
D—Hydraulic and mechanical.
H—Hydraulic.
M—Mechanical.
V—Vacuum.

BRAKES—HAND

Location

C—Center of double propeller shaft.
2—Rear wheels.
4—Four wheels.
R—Worm or bevel gearshaft.
T—Transmission.
F—Driveshaft.

Type

D—Tru-Stop disk.
I—Internal.
X—External.

BRAKE DRUMS

Material

a—Cast alloy iron.
A—American Car Fdry.
C—Centrifuse
D—Dayton.
E—Ermalite.
G—Gunite.
H—Hunt Spiller.
c—Cast iron.
p—Pressed steel.
P—Pressed steel.
s—Cast steel.
(Where a combination of any of the above is used, the first reference mark applies to the front and the second to the rear drums.)

CLUTCH

Type

D—Multiple disk.
dp—Double plate.
O—Plate in oil.
P—Single plate

ENGINE

Valve Arrangement

F—Inlet valve in head; exhaust valve at side.
H—In head.
L—"L" head, valves at side.
T—Inlet and exhaust on opposite sides.

Camshaft Drive

C—Chain.
G—Gear.

Piston Material

A—Aluminum alloy.
B—Semi-steel.
C—Cast iron.
N—Nickel iron.
S—Aluminum alloy with strut.

Main Bearings

r—Rear main bearing.

Oiling System

CC—Pressure to main, connecting rod and camshaft bearings.
FP—Pressure to main, connecting rod camshaft bearings and piston pins.
PC—Pressure to mains and connecting rod bearings.
PG—Pump, gravity and splash.
PS—Pressure with splash.

FRAME

Type

I—"I" Beam.
C—Channel.
T—Channel tapered front and rear.
L—Channel reinforced with liner.
B—Channel reinforced with both liner and fishplate.
P—Channel reinforced with plate.
TL—Channel tapered front and rear reinforced with liner.
D—Drop Center
Tf—Tapered front
X—x-Braced

FUEL SYSTEM

Fuel Feed

E—Electric pump.
G—Gravity.
M—Mechanical pump.
P—Pressure.
V—Vacuum.
B—Bosch
C—Cummins

REAR AXLE

Final Drive and Type

B—Bevel.
C—Chain.
D—Dead.
F—Full-floating
2—Double Reduction.
S—Spiral bevel.
W—Worm.
w/2—Worm or Double Reduction Optional.
½—Semi-floating.
¾—Three-quarter floating.

Drive and Torque

A—Radius Rods and Torque Arm.
H—Hotchkiss. (springs)
R—Radius Rods
T—Torque Arm.
U—Torque Tube.

SPRINGS

Auxiliary Type

½—Semi-elliptic above or below main springs.
¼—Quarter elliptic.
C—Coil spring.
N—No.
O—Optional.

TIRES

B—Balloon.
DB—Dual Balloons.
P—High Pressure Pneumatics.
DP—Dual High Pressure Pneumatics.
S—Solids.
DS—Dual Solids.
*—Pneumatics at extra cost.

TRANSMISSION

Location

A—Amidships.
J—Unit with jackshaft.
U—Unit with engine.

Auxiliary Location

No—Not furnished.
O2—2 speed axle unit optional at extra cost.
Op—Optional at extra cost.
A—Amidships.
R—Rear of amidships main transmission.
U—Unit with engine.

WHEELS DRIVEN

2C—Center pair of rear wheels
2R—Rear pair of rear wheels.
4F—Front and center pair of rear wheels.
4R—Four rear wheels.
6—Six wheels

Line Number	MAKE AND MODEL	GENERAL (See Keynote): Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight	Chassis Wt. (Stripped)	TIRE SIZE: Front	Rear	MAJOR UNITS — ENGINE: Make and Model	No. of Cylinders Bore and Stroke	TRANSMISSION: Make and Model	Location and Forward Speeds	Aux. Location and Speeds	REAR AXLE: Make and Model	Gear and Type	Drive and Torque	GEAR RATIOS: In High	In Low	FRAME: Side Rail Dimensions	Type
1	A.C.F. 160	6	6950	186	222	26000	10170	B9.75/22	B9.75/22	HaS 160	6-4¼x5½	BL 1714	U 4	Op	Tim 76730	2F	R	7.46	52.7	8x3x3/16	P
2	175B	6½	8300	186	222	26000	10750	B10.50/22	B10.50/22	HaS 175	6-5x6	BL 714	U 4	Op	Tim 76730	2F	R	7.46	38.6	8x3x3/16	P
3	175A	7½	8800	186	240	30000	11610	B10.50/24	B10.50/24	HaS 175	6-5x6	BL 714	U 4	Op	Tim 79730	2F	R	7.48	38.7	8x3x3/16	P
4	Armleder 11H	1½-2½	1295	156	195	11500	4850	B6.50/20	DB6.50/20	Con 16C	6-3⅜x4⅝	BL 35	U 4	No	Tim	BF	H	5.83	31.2	6x3x¼	P
5	21Ha	2½-4	2185	160	207	15300	5450	B8.25/20	DB8 25/20	Her WXC	6-4x4½	Own	U 5	No	Tim	BF	H	6.06	38.5	6x3x¼	P
6	31Ha	3-4½	2695	146	213	19500	5750	B9.00/20	DB9.00/20	Her WXC	6-4x4½	Fu 5A38	U 5	No	Tim	BF	R	6.02	39.2	7x3x¼	P
7	41Ha	4½-6	3050	146	227	23000	6600	B9.75/20	DB9.75/20	Her WXC	6-4x4½	Fu 5A38	U 5	No	Tim	BF	R	6.83	43.8	7x3x¼	P
8	61Ha	5-7	3725	146	227	24000	7400	B9.75/20	DB9.75/20	Her WXC2	6-4⅛x4½	Fu 5A38	U 5	No	Own	2F	R	7.07	49.7	8⅛x3x3/16	P
9	71Ha	8-11	5895	152	247	35000	9820	B10.50/24	DB10.50/24	Her RXC	6-4⅝x5¼	Fu 5A53	U 5	No	Wis	2F	R	7.07	49.8	8⅛x3x3/16	P
10	(T) TRD	10	4150	148	174	35000	7100	B9.00/20	DB9.00/20	Her YXC	6-4⅜x4¾	Fu 5A53	U 5	No	Own	2F	R	7.8	56.8	7x3x¼	P
11	(T) TRDA	12	4350	148	174	39000	7226	B9.75/20	DB9.75/20	Her YXC3	6-4⅝x4¾	Fu 5A53	U 5	No	Own	2F	R	7.8	56.8	7x3x¼	P
12	(T) TRDB	15	4595	148	174	45000	7326	B9.75/20	DB9.75/20	Her RXC	6-4⅝x5¼	Fu 5A53	U 5	No	Wis	2F	R	7.8	56.8	7x3x¼	P
13	Autocar RG	2½	3000	150	192	....	6100	P34x7	DP34x7	Own R	6-3¾x4¾	Own T	U 4	No	Own D	2F	H	6.21	39.3	8x3x¼	T
14	D	3	3500	150	192	....	6140	P34x7	DP34x7	Own SD	6-4x4¾	Own T	U 4	No	Own D	2F	H	6.21	39.3	8x3x¼	T
15	DF	3½	3950	150	192	....	7010	B9.00/20	DB9.00/20	Own SD	6-4x4¾	Own T	U 4	No	Own TE	2F	H	6.43	40.7	8x3x¼	T
16	DH	4	4150	150	174	....	7400	P36x8	DP36x8	Own SD	6-4x4¾	Own T	U 4	No	Own N	2F	H	8.57	54.3	8x3x¼	T
17	N	4	4650	191	227	....	8275	B9.75/20	DB9.75/20	Own SCH	6-4¼x4¾	Own D	U 5	No	Own N	2F	H	7.20	45.6	9x3x¼	T
18	NF	5	4750	151	227	....	8370	B9.75/22	DB9.75/22	Own SCH	6-4¼x4¾	Own D	U 5	No	Own TF	2F	H	7.20	42.1	9x3x¼	T
19	S	5	5500	168	168	....	9675	B9.75/22	DB9.75/22	Own SCH	6-4¼x4¾	Own T	U 4	A 3	Own CG	2F	H	8.52	54.0	9x3x¼	T
20	C	7½	6650	158	176	....	11784	B10.50/24	DB10.50/24	Own SCM	6-4½x4¾	BL 734	U 4	A 3	Wis 78720	2F	H	9.92	121.	10½x3x3/16	T
21	CE	7½	6000	172	203	....	10300	S36x7	DS40x8	Own SCM	6-4½x4¾	Own T	U 4	No	Own C	2F	R	8.57	52.6	9x3x¼	T
22	CBS	7½	6200	203	203	....	9800	P42x9	DP42x9	Own SCM	6-4½x4¾	Own B	A 4	No	Own C	2F	H	8.57	52.6	9x3x¼	T
23	T	7½	5900	192	242	....	9680	B10.50/22	DB10.50/22	Own SCM	6-4½x4¾	Own D	U 5	No	Own TG	2F	H	7.20	88.5	9x3x¼	T
24	TE	8½	6300	214	228	....	10020	B9.75/22	DB9.75/22	Own SCM	6-4½x4¾	BL 7351	U 5	No	Own CG	2F	H	7.20	87.6	10½x3x3/16	T
25	(Eng.und.seat) UD	3	3500	97	145	....	6740	P34x7	DP34x7	Own SD	6-4x4¾	Own T	U 4	No	Own H & D	2F	H	6.21	39.3	8x3x¼	T
26	" UDF	3½	3950	127	145	....	7655	B9.00/20	DB9.00/20	Own SD	6-4x4¾	Own T	U 4	No	Own TE	2F	H	6.43	40.7	8x3x¼	T
27	" UN	4	4650	96	163	....	8635	B9.75/20	DB9.75/20	Own SCH	6-4¼x4¾	Own D	U 5	No	Own C & N	2F	H	7.20	45.6	8x3x¼	T
28	" UNF	5	4850	128	163	....	9200	B9.75/22	DB9.75/22	Own SCH	6-4¼x4¾	Own D	U 5	No	Own TF	2F	H	7.20	42.1	9x3x¼	T
29	" US	5	5300	109	109	....	9115	B9.75/22	DB9.75/22	Own SCH	6-4¼x4¾	Own T	U 4	No	Own CG&TG	2F	H	7.20	45.6	9x3x¼	T
30	" UT	6	5900	128	163	....	9660	B10.50/22	DB10.50/22	Own SCM	6-4½x4¾	Own D	U 5	No	Own CG&TG	2F	H	7.20	45.6	9x3x¼	T
31	" U. TE	8½	6300	145	163	....	10525	B9.75/22	DB9.75/22	Own SCM	6-4½x4¾	Own T	U 4	A 3	Own CG&TG	2F	H	7.20	45.6	10½x3x3/16	T
32	Available W-120	1½	1245	Op	Op	11200	4000	B6.50/20	DB6.50/20	Wau BL	6-3½x4¼	WG T9	U 4	No	Tim 53200	SF	H	6.6	42.2	10x2½x3/16	TX
33	W-170	2½	1620	Op	Op	13400	4700	B7.50/20	DB7.50/20	Wau BL	6-3½x4¼	WG T9	U 4	No	Tim 54300	SF	R	6.8	43.5	10x2½x3/16	TX
34	W-210	2½	1720	Op	Op	13400	4800	B7.50/20	DB7.50/20	Wau BK	6-3¾x4¼	BL 234	U 4	No	Tim 54300	SF	R	6.8	43.5	10x2½x3/16	TX
35	W240	3	1975	Op	Op	16300	5400	B8.25/20	DB8.25/20	Wau BK	6-3¾x4¼	BL 234	U 4	No	Tim 56200	SF	R	7.4	47.4	12x2½x¼	TX
36	W300	4	2750	Op	Op	20700	7000	B9.00/20	DB9.00/20	Wau 6-110	6-4x4¾	Fu 5A-380	U 5	No	Tim 58205	SF	R	7.8	54.6	12x2½x¼	TX
37	W400	5	3750	Op	Op	25500	8200	B9.75/20	DB9.75/20	Wau 6-125	6-4⅜x5⅛	Fu 5A-530	U 5	No	Tim 65720H	WF	R	8.5	55.6	14x3x3/16	TX
38	Biederman 10	1-1½	895	130	160	6000	2800	B6.50/18	B6.50/18	Con 25A	6-3⅜x4	BL 124	U 4	No	Cla B373	BF	R	5.10	31.6	7x3x3/16	T
39	20	1-1½	1195	145	175	10000	3200	B6.50/20	DB6.50/20	Con 25A	6-3⅜x4	BL 124	U 4	No	Cla B373	BF	R	6.37	39.4	7x3x3/16	T
40	30	1½-2	1495	163	178	12000	4100	B7.50/20	DB7.50/20	Con 25A	6-3⅜x4	BL 124	U 4	No	Cla B611	BF	R	6.37	39.4	7x3x¼	T
41	45	1½-5	1795	180	198	16000	4990	B8.25/20	DB8.25/20	Lyc ASE	6-3¾x4½	Cla R100	U 5	No	Cla B613	BF	R	6.37	45.0	7½x3x¼	T
42	35	2-2½	1850	146	188	12000	4680	B7.50/20	DB7.50/20	Her JXC	6-3¾x4¼	BL 234	U 4	Op	Cla B611	BF	R	6.37	40.8	7x3x¼	T
43	40	2½-3	2100	158	188	16000	4840	B8.25/20	DB8.25/20	Her JXC	6-3¾x4¼	BL 234	U 4	Op	Cla B611	BF	R	6.37	40.8	8x3x¼	T
44	50	2½-3	2400	176	188	20000	5600	B9.00/20	DB9 00/20	Her JXC	6-3¾x4¼	BL 234	U 4	Op	Cla B805	BF	R	6.42	41.2	8x3x¼	T
45	55	3-3½	2750	180	200	20000	6450	B9.00/20	DB9 00/20	Con E602	6-4⅛x4½	BL 524	U 4	Op	Cla B805	BF	R	6.42	46.7	8x3x¼	T
46	60	3½-5	3150	170	200	24000	68[illegible]0	B9.75/20	DB9.75/20	Con E602	6-4⅛x4½	BL 524	U 4	Op	Cla B805	BF	R	7.17	52.1	8x3x¼	T
47	70	3½-5	3600	150	210	24000	7530	B9.75/20	DB9 7 20	Con E602	6-4⅛x4½	BL 524	U 4	Op	Wis 1237	2F	R	8.00	58.7	8x3½x¼	T
48	80	5-7	3900	150	210	28000	7800	B10.50/20	DB10.50/20	Con E603	6-4¼x4½	BL 524	U 4	Op	Wis 1237	2F	R	8.94	65.1	8x3½x¼	T
49	Brockway 80	1½-2	1185	149	168	10500	4035	B6.50/20	DB6.50/20	Con 26B	6-3⅜x4	Wa T9	U 4	No	Tim 53200H	SF	H	5.66	36.2	7 3/16x2½x7/32	T
50	90	2-2½	1485	149	186	12500	4480	B7.00/20	DB7.00/20	Con 28B	6-3⅜x4⅝	Wa T9	U 4	No	Tim 54300H	SF	H	5.83	37.4	7 3/16x2½x7/32	T
51	100	2-3	1800	168	200	15000	5125	B7.50/20	DB7.50/20	Con 28B	6-3⅜x4⅝	Fu	U 5	No	Tim 54300H	SF	H	5.83	46.0	7 3/16x2½x7/32	T
52	120	2-3	2090	156	188	15000	5800	B7.50/20	DB7.50/20	Con 30B	6-4x4⅛	BL 314	U 4	No	Tim 54300H	SF	H	5.83	38.5	7½x3x¼	T
53	140	2½-3½	2690	156	200	17500	6385	B8.25/20	DB8.25/20	Con 30B	6-4x4⅛	BL 314	U 4	Op	Wis 4916L	2F	R	6.66	43.5	7½x3x¼	T
54	150	2½-3½	2540	188	200	18500	6245	B8.25/20	DB8.25/20	Con 32B	6-4⅛x4½	Fu 5A38	U 5	Op	Tim 56200H	SF	R	5.71	35.0	7½x3x¼	T
55	141	3-4	3175	170	200	19500	7450	B9.00/20	DB9.00/20	Con 30B	6-4x4⅛	BL 314	U 4	Op	Wis 70000L	2F	R	7.0	46.2	8x3x¼	T
56	160	3½-4	3175	188	200	21000	7500	B9.00/20	DB9.00/20	Con 32B	6-4⅛x4½	Fu 5A38	U 5	Op	Tim 58205H	SF	R	6.14	48.5	8x3x¼	T
57	170	3-4	3450	170	212	19500	7700	B9.00/20	DB9.00/20	Con 33B	6-4⅛x4¾	BL 5352	U 5	Op	Wis 70000L	2F	R	5.78	44.5	8x3x¼	T
58	175	3-4	3850	170	224	24000	7900	B9.00/20	DB9.00/20	Con 34B	6-4⅜x4¾	BL 5352	U 5	Op	Wis 70000L	2F	R	5.78	44.5	8x3x¼	T
59	195	5	4000	170	224	24000	8540	B9.75/20	DB9.75/20	Con 33B	6-4⅛x4¾	BL 5352	U 5	Op	Wis 1337BH	2F	R	5.63	43.4	8⅛x3x3/16	T
60	220	7½	4700	170	224	28000	8980	B10.50/20	DB10.50/20	Con 34B	6-4⅜x4¾	BL 5352	U 5	Op	Wis 1737KH	2F	R	5.75	44.3	8⅛x3x3/16	T
61	260	7½-10	5850	212	240	30000	9585	B10.50/22	DB10 50/22	Con 35B	6-4½x5¼	Fu MHU	U 4	Op	Wis 1737KH	2F	R	8.05	50.7	8¼x3x5/16	T
62	260S	10	6200	212	240	34000	10075	B10.50/24	DB10.50/24	Con 35B	6-4½x5¼	Fu MHU	U 4	Op	Wis 1737KH	2F	R	8.05	50.7	8¼x3x5/16	B
63	V-1200	15	10500	156	240	60000	12400	B11.25/22	DB11.25/22	A La F V12	12-4x5	BL 7351	U 5	Op	Wis 1910W	2F	R	7.95	49.8	10x3x3/16	T
64	PC-15-SD	2-3	1950	168	200	15000	4985	B7.50/20	DB7.50/20	Con 28B	6-3⅜x4⅝	Fu	U 5	Op	Tim 54300H	SF	H	5.83	46.0	7 3/16x2½x7/32	T
65	PC-22-SD	3½-4	3200	188	200	21000	7080	B9.00/20	DB9.00/20	Con 32B	6-4⅛x4½	Fu 5A38	U 5	Op	Tim 58205H	SF	R	6.14	48.5	8x3x¼	T
66	PC-22-SP	3-4	4200	170	212	21000	7640	B9.00/20	DB9.00/20	Con 33B	6-4⅛x4¾	BL 5352	U 5	Op	Tim 58205	SF	R	6.14	47.3	8x3x¼	T
67	PC-22-DR	3-4	4200	170	212	19500	7540	B9.00/20	DB9.00/20	Con 33B	6-4⅛x4¾	BL 5352	U 5	Op	Wis 70000	2F	R	5.78	44.5	8x3x¼	T
68	PC-34-SP	5	5000	188	224	24000	8150	B9.75/20	DB9.75/20	Con 34B	6-4⅜x4¾	BL 5352	U 5	Op	Wis 1337BW	2F	R	5.63	43.4	8⅛x3x3/16	T
69	PC-34-SD	5	4900	188	224	24000	8125	B9.75/20	DB9.75/20	Con 33B	6-4⅛x4¾	BL 5352	U 5	Op	Wis 1337BW	2F	R	5.63	43.4	8⅛x3x3/16	T
70	PC-68-SD	7½	5250	188	224	28000	8500	B9.75/20	DB9.75/20	Con 34B	6-4⅜x4¾	BL 5352	U 5	Op	Wis 1737KW	2F	R	5.75	44.3	8⅛x3x3/16	T
71	PC-34-SPX	7½	5350	200	224	28000	8600	B9.75/20	DB9.75/20	Con 35B	6-4½x5¼	Fu 5A53	U 5	Op	Wis 1337BW	2F	R	5.63	45.4	8⅛x3x3/16	T
72	PC-68-SPX	10	5950	212	224	34000	9585	B9.75/20	DB9.75/20	Con 35B	6-4½x5¼	Fu 5A53	U 5	Op	Wis 1737KW	2F	R	6.38	51.5	8¼x3x5/16	T
73	PC-68-VSD	15	10500	200	240	60000	12250	B10.50/20	DB10.50/20	A LaF V12	12-4x5	BL 7351	U 5	Op	Wis 1910W	2F	R	7.95	49.8	10x3x3/16	T
74	Chevrolet Comm'l	½	365	112	112	4400	2110	B5.50/17	B5.50/17	Own	6-3 5/16x4	Own	U 3	No	Own	S½	U	4.11	12.4	5⅜x2 3/16x⅛	T
75	Utility	1½	515	131	131	9300	2995	P30x5	P32x6	Own	6-3 5/16x4	Own	U 4	No	Own	S½	U	5.43	39.2	7x2¾x5/32	C
76	Utility	1½	545	157	157	9300	3100	P30x5	P32x6	Own	6-3 5/16x4	Own	U 4	No	Own	S½	U	5.43	39.2	7x2¾x5/32	C
77	Corbitt (3) 8B4	1½	980	134	134	8500	3200	B6.00/20	P32x6	Con W10	4-3⅞x4¼	Ow 8T	U 4	No	Own 8R	SF	H	5.4	38.4	5⅝x3x5/32	P
78	8B6	1½	1080	136	136	8500	3275	B6.00/20	P32x6	Con 25A	6-3⅜x4	Ow 8T	U 4	No	Own 8R	SF	H	5.4	38.4	5⅝x3x5/32	P
79	10B6	1½-2	1310	171	191		3950	B6.50/20	DB6.50/20	Con 25A	6-3⅜x4	BL 214	U 4	No	Tim 53200H	SF	H	Op	Op	5⅝x3½x¼	T
80	9B6	1½-2½	2185	152	183		4200	P32x6	DP32x6	Con 20C	6-3⅜x4⅝	BL 224	U 4	No	Tim 54200H	SF	H	5.57	27.8	7x3½x¼	T
81	12B6	2-3	3060	163	220		4870	B7.50/20	DB7.50/20	Con E601	6-3¾x4½	BL 334	U 4	No	Tim 56200H	SF	H	Opt	Opt	7x3½x¼	T
82	12W6	2-3	2950	165	220		4910	B7.50/20	DB7.50/20	Con E601	6-3¾x4½	BL 334	U 4	No	Tim 64800H	WF	H	Opt	Opt	7x3½x¼	T
83	15B6	2½-3½	3740	174	220		5870	P34x7	DP34x7	Con E601	6-3¾x4½	BL 334	U 4	No	Tim 58200H	SF	H	Opt	Opt	7x3½x¼	T
84	15W6	2½-3½	3850	183	224		6160	P34x7	DP34x7	Con E601	6-3¾x4½	BL 334	U 4	No	Tim 65200H	w/2F	H	Opt	Opt	7x3½x¼	T
85	18	2½-4	4400	178	230		8100	P36x8	DP36x8	Con E602	6-4⅛x4½	BL 334	U 4	No	Tim 65720H	w/2F	H	Opt	Opt	8x3½x¼	T
86	24	3½-5	5115	195	230		9200	B9.75/20	DB9.75/20	Con E603	6-4¼x4½	BL 60	A 7	No	Tim66720H	w/2F	H	Opt	Opt	8x3½x¼	T
87	33	5-7½	6160	195	230		10000	P40x10	DP40x10	Con 21R	6-4⅝x5¼	BL 60 Max	A 7	No	Tim68720TW	w/2F	H	Opt	Opt	8x3x⅜	T
88	(T)10B6T	3-5	1650	(3)	(3)		3950	B6.50/20	DB6.50/20	Con 20C	6-3⅜x4⅝	BL 224	U 4	No	Tim 53200H	SF	H	Opt	Opt	5¾x3½x¼	T
89	(T)9B6T	4-6	2600	(3)	(3)		4200	B7.50/20	DB7.50/20	Con E601	6-3¾x4½	BL 334	U 4	No	Tim 54200H	SF	H	Opt	Opt	7x3½x¼	T
90	(T)12BT6	4-7	3465	(3)	(3)		4870	B8.25/20	DB8.25/20	Con E602	6-4⅛x4½	BL 335	U 4	No	Tim 56200H	SF	H	Opt	Opt	7x3½x¼	T
91	(T)15B6T	5-8	4875	(3)	(3)		5870	B9.00/20	DB9.00/20	Con 21R	6-4⅝x5¼	BL 335	U 4	No	Tim 58200H	SF	H	Opt	Opt	7x3½x¼	T
92	(T)18D6T	8-10	5500	(3)	(3)		8100	B9.75/20	DB9.75/20	Con 22R	6-4½x5¼	BL 5351	U 5	No	Tim 75733H	2F	H	Opt	Opt	8x3½x¼	T
93	(T)24D6T	10-15	6500	(3)	(3)		9200	B10.50/20	DB10.50/20	Con 16H	6-4⅞x5⅛	BL 7212	U 5	U3	Tim 66720W	2F	H	Opt	Opt	8x3x⅜	C
94	Day-Elder (4) 75	1½	945	135	156	8500	3700	B6.00/20	B6.50/20	Her JXA	6-3⅜x4¼	WG T9	U 4	No	Tim 53200H	BF	H	5.66	36.2	5¼x3¾x¼	C
95	85	2	1195	135	168	9500	4000	B6.00/20	DB6.00/20	Her JXB	6-3⅜x4¼	WG T9	U 4	No	Tim 53200H	BF	H	5.66	36.2	5¼x3¾x¼	C
96	110	2½	1495	156	186	11500	4800	B7.00/20	DB7.00/20	Her JXC	6-3¾x4¼	WG T9	U 4	No	Tim 54200H	BF	H	5.83	37.3	7x3¾x¼	C
97	130	3	1995	157	199	13000	6200	B7.50/20	DB7.50/20	Her WXC	6-4x4½	BL 334	U 4	No	Tim 56200H	BF	H	6.17	37.9	7x3¾x¼	C
98	160	3½	2445	165	204	17500	6400	B7.50/20	DB9.00/20	Her WXC3	6-4⅛x4½	BL 334	U 4	No	Tim 58200H	BF	H	6.81	41.9	9x3¾x¼	C
99	200	4	2895	165	218	20000	7200	B9.00/20	DB9.00/20	Her WXC3	6-4⅛x4½	BL 334	U 4	No	Tim 65720H	WF	H	7.75	47.6	10x3¾x¼	C
100	240	5	3895	162	234	28500	9500	B10.50/20	DB10.50/20	Her RXC	6-4⅝x5¼	BL 534	U 4	No	Tim 66720H	WF	H	7.60	52.1	10x3¾x¼	C
101	Diamond T 211SF	1½	595	135	158	8500	3250	B5.50/20	B6.50/20	Her JXA	6-3⅜x4¼	WG T9	U 4	No	Cla B364	S½	H	5.4	34.6	7x2⅜x7/32	T
102	211FF	1½	615	135	158	8500	3250	B5.50/20	B6.50/20	Her JXA	6-3⅜x4¼	WG T9	U 4	No	Cla B373E	SF	H	Opt	Opt	7x2⅜x7/32	T
103	226	1½	725	135	158	10000	3500	B6.00/20	DB6.00/20	Her JXA	6-3⅜x4¼	WG T9	U 4	No	Cla B410	SF	H	Opt	Opt	7x2⅜x7/32	T
104	241	1¾	825	137	179	10000	3500	B6.00/20	P32x6	Her JXA	6-3⅜x4¼	WG T9	U 4	No	Cla B410	SF	H	Opt	Opt	8x3x7/32	T
105	311	2	1025	155	179	12000	4200	B6.50/20	DB6.50/20	Her JXB	6-3⅜x4¼	WG T9	U 4	No	Cla B613	SF	H	Opt	Opt	8x3x7/32	T
106	261	2	975	155	179	11000	4000	B6.50/20	DB6.50/20	Her JXA	6-3⅜x4¼	WG T9	U 4	No	Cla B613	SF	H	Opt	Opt	8x3x7/32	T
107	351	2½	1325	155	179	14000	4700	B7.00/20	DB7.00/20	Her JXC	6-3¾x4¼	Cla R103	U 5	No	Cla B642	SF	H	Opt	Opt	8x3x7/32	T
108	326B	2½	1225	155	179	13000	4600	B7.00/20	DB7.00/20	Her JXB	6-3⅜x4¼	WG T9	U 4	No	Cla B642	SF	H	Opt	Opt	8x3x7/32	T
109	326DR	2½	1395	155	179	13000	4600	B7.00/20	DB7.00/20	Her JXB	6-3⅜x4¼	WG T9	U 4	No	Wis 4916L	2F	R	Opt	Opt	8x3x7/32	T
110	410A	3	1795	160	194	15000	4800	B7.50/20	DB7.50/20	Her WXC	6-3⅝x4¼	Cla R909	U 5	No	Cla B642	SF	H	Opt	Opt	8x3x7/32	T
111	376	3	1695	155	179	15000	5000	B7.50/20	DB7.50/20	Her JXC	6-3¾x4¼	Cla R103	U 5	No	Wis 4916L	2F	R	Opt	Opt	6⅛x3x¼	P
112	510	4	2095	168	201	18000	6400	B7.00/20	DB8.25/20	Her WXC	6-4x4½	Cla R909	U 5	No	Tim 58205H	2F	R	Opt	Opt	6⅛x3x¼	P
113	425	4	2395	160	194	18000	6200	B8.25/20	DB8.25/20	Her WXC	6-4x4½	Cla R909	U 5	No	Wis 70000	2F	R	Opt	Opt	6⅛x3x¼	P
114	603A	5	3300	169	230	20000	8100	B9.00/20	DB9.00/20	Her YXC	6-4⅜x4¾	BL5351	U 5	Op	Wis 1337H	2F	R	Opt	Opt	6⅛x3x¼	P
115	525	5	2605	168	201	20000	7200	B9.00/20	DB9.00/20	Her WXC3	6-4⅛x4½	Cla R909	U 5	No	Wis 1337H	2F	R	Opt	Opt	6⅛x3x¼	P
116	740	5-6	3900	178	232	22000	8500	B9.75/20	DB9.75/20	Her RXB	6-4½x5¼	BL5351	U 5	Op	Wis 1337H	2F	R	Opt	Opt	7⅛x3½x¼	P
117	750	5-7	4600	178	232	28000	10000	B9.75/22	DB9.75/22	Her RXC	6-4⅝x5¼	Co 8A5	A 5	Op	Wis 1737 KW	2F	R	Opt	Opt	7⅛x3½x¼	P
118	750H	5-7	4200	178	232	28000	10000	B9.75/20	DB9.75/20	Her RXC	6-4⅝x5¼	Co 8A5	A 5	Op	Wis 1737H	2F	R	Opt	Opt	7⅛x3½x¼	P
119	1515	7½	6800	171	Op	36000	12000	B10.50/24	DB10.50/24	Her HXB	6-5x6	BL 744	A 4	A 3	Wis 79730	2F	R	Opt	Opt	8x3x7/32	P
120	Differential E-131	2½	3200	160	160	18100	5100	B9.00/20	DB9.00/20	Lyc ASD	6-3⅝x4½	BL 314	U 4	No	Tim 58200	BF	H	7.8	51.4	12x2½x¼	P
121	Dodge Bros. HC	Com'l	340	111	111	....	1775	B5.25/17	B5.25/17	Own	6-3⅛x4⅜	Own	U 3	No	Own	S½	H	4.37	12.2	5x2x⅛	X
122	KC	Com'l	370	111	111	....	1785	B5.27/17	B5.25/17	Own	6-3⅛x4⅜	Own	U 3	No	Own	S½	H	4.11	11.5	5x2x⅛	X
123	(Cont.) HCL	Com'l	365	119	119	....	1805	B5.25/17	B5.25/17	Own	6-3⅛x4⅜	Own	U 3	No	Own	S½	H	4.37	12.2	5 1/16x2 1/16x⅛	X

Line Number	Engine Details: Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	Main Bearings: Number and Diameter	Main Bearings: Length	Oiling System Type	Governor Make	Fuel Syst.: Carburetors Make	Fuel Feed	Electrical: Ignition System Make	Generator, Starter Make	Clutch Type and Make	Radiator Make	Universals Make	Front Axle: Make and Model	Steering Gear Make	Brakes: Service: Make, Location Type, Operation	Lining Area	Drum Material	Hand Location, Type	Body Mounting Data: Cab to Rear of Frame	Cab to Rear Axle	Width of Frame	Springs: Front	Rear	Auxiliary Type
1	468	4.4	322	43.3	120-2200	H	C	A	4-2¾	10¾	CC	Ha	Zen	V	DR	DR	P.BL	Lo	Spi	Tim 27451	Ros	O4IA	720	A	CD	172	102	33½	42x3	56x4	½
2	707	4.4	500	60.	175-2200	H	C	A	7-3¼	14⅞	CC	Ha	Zen	M	DR	DR	dp.Lo	Lo	Spi	Tim 27451	Ros	O4IA	720	A	CD	172	102	33½	42x3	56x4	½
3	707	4.4	500	60.	175-2200	H	C	A	7-3¼	14⅞	CC	Ha	Zen	M	DR	DR	dp.Lo	Lo	Spi	Tim 27451	Ros	O4IA	816	A	CD	172	102	33½	42x3	56x4	½
4	248	5.0	150	27.3	65-2600	L	G	C	7-2⅜	10⅝	FP	No	Str	M	DR	DR	D.BL	Yo	Spi	Tim	Ros	L4IH	380	G	TX	129½	Opt	31½	40x2½	50x3	½
5	339	4.7	225	38.4	73-2200	L	G	C	7-2⅝	13¼	PC	Mo	Str	M	AL	AL	D.BB	Yo	Spi	Tim	Ros	L4IHV	452	G	TX	129½	Opt	31½	40x2½	50x3	½
6	339	4.7	225	38.4	73-2200	L	G	C	7-2⅝	13¼	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Tim	Ros	L4IHV	578	G	TX	106	Opt	31½	40x2½	62⅝x2½	N
7	339	4.7	225	38.4	73-2200	L	G	C	7-2⅝	13¼	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	658	G	TX	106	Opt	31½	40x2½	62⅝x2½	N
8	360	4.7	238	40.3	80-2200	L	G	C	7-3	15	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	768	H	TX	106	Opt	31½	41x2½	62⅝x2½	N
9	529	4.4	355	51.2	115-2200	L	G	C	7-3	15	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Own	Ws4IA	847	G	TD	118	Opt	31½	41x2½	62⅝x3	N
10	428	4.4	280	45.9	93-2200	L	G	C	7-3	15	PC	Mo	Str	M	AL	AL	D Fu	Yo	Spi	Shu	Ros	L4IHV	893	H	TD	93 1/16	Opt	31½	41x2½	62⅝x3	N
11	478	4.4	318	51.2	103-2200	L	G	C	7-3	15	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	893	H	TD	92 1/16	Opt	31½	41x2½	62⅝x3	N
12	529	4.4	355	51.2	115-2200	L	G	C	7-3	15	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	893	H	TD	93 1/16	Opt	31½	41x2½	62⅝x3	N
13	314	5.2	213	33.7	75-2400	L	G	C	7-3	12⅝	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 31000	Ros	LO4ID V	450	c	2I	88⅜	60⅝	34⅛	40x2½	54x3	½
14	358	5.2	240	38.4	84-2500	L	G	C	7-3	12⅝	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 33000	Ros	LO4ID V	450	c	2I	88⅜	60⅝	34⅛	42½x3	54x3	½
15	358	5.2	240	38.4	84-2500	L	G	C	7-3	12⅝	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 35000	Ros	LO4ID V	519	c	2I	88⅜	60⅝	34⅛	42½x3	54x3	½
16	358	5.2	240	38.4	84-2500	L	G	C	7-3	12⅝	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 35000	Ros	LO4ID V	519	c	2I	88⅜	60⅝	34⅛	42½x3	54x3	½
17	404	5.1	271	43.4	94-2500	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 35000	Ros	LO4ID V	519	c	FD	188⅛	102¼	34⅛	42x3	53x3	½
18	404	5.1	271	43.4	94-2500	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 35000	Ros	LO4ID V	519	c	FD	89¾	61¾	34⅛	42¼x3	53½x4	½
19	404	5.1	271	43.4	94-2500	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 26450	Ros	LO4ID V	543	c	FD	161⅝	82¼	34⅛	41⅝x3	53½x4	½
20	453	5.1	309	48.6	101-2400	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 27450	Ros	LO4ID V	660	c	FD	115⅞	71½	34⅛	41⅜x3	54⅜x4	½
21	453	5.1	309	48.6	101-2400	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Own 8CH	Ros	O2IMV	502	c	FD	88½	158⅞	34⅛	42½x3	55x4	½
22	453	5.1	309	48.6	101-2400	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 26450	Ros	BO4IMV	670	c	FD	119½	210	34⅛	42½x3	54⅜x4	½
23	453	5.1	309	48.6	101-2400	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 26450	Ros	O4IA	543	c	FD	162⅞	102¾	34⅛	41⅜x3	54⅜x4	½
24	453	5.1	309	48.6	101-2400	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 26450	Ros	O4IA	543	c	FD	244⅞	127½	34¼	42½x3	54⅜x4	½
25	358	5.2	240	38.4	84-2500	L	G	C	7-3	12⅝	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 35000	Ros	LO4IDV	450	c	2I	134	72¼	34	41¼x3	53x3	½
26	358	5.2	240	38.4	84-2500	L	G	C	7-3	12⅝	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 35000	Ros	LO4IDV	519	c	2I	176	102¼	34	41⅜x3	53x3	½
27	404	5.1	271	43.4	94-2500	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 26450	Ros	LO4IDV	543	c	FD	116	71¼	34	41⅜x3	53x3	½
28	404	5.1	271	43.4	94-2500	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 26450	Ros	LO4IDV	543	c	FD	176	103¼	34	41⅜x3	53x3	½
29	404	5.1	271	43.4	94-2500	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 26450	Ros	LO4IDV	543	c	FD	134	84¼	34	41⅜x3	53x3	½
30	453	5.1	309	48.6	101-2400	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 27450	Ros	O4IA	599	c	FD	158	103¼	34	41⅜x3	53½x4	½
31	453	5.1	309	48.6	101-2400	L	G	C	7-3	14½	FP	Ow	Str	M	DR	DR	dp.Lo	GO	Spi	Tim 27450	Ros	O4IA	599	c	FD	242	120¼	34	41⅜x3	53½x4	½
32	245	5.1	165	29.4	73-3000	L	G	A	7-2⅛	10¼	FP	No	Zen	M	DR	DR	P.Lo	Ch	Blo	Tim 30000H	Ros	L4IH	269	a	TX	Opt	Opt	32	42½x2¼	58x2½	N
33	245	5.1	165	29.4	73-3000	L	G	A	7-2⅛	10¼	FP	Wa	Zen	M	DR	DR	P.Lo	Ch	Blo	Tim 31000H	Ros	L4IH	330	a	TX	Opt	Opt	32	42½x2¼	58x2½	N
34	282	5.1	188	33.8	85-3200	L	G	A	7-2⅛	10¼	FP	Wa	Zen	M	DR	DR	P.BL	Ch	Blo	Tim 31000H	Ros	L4IH	330	a	TX	Opt	Opt	32	42½x2¼	58x2½	N
35	282	5.1	188	33.8	85-3200	L	G	A	7-2⅛	10¼	FP	Wa	Zen	M	DR	DR	P.BL	Ch	Blo	Tim 33000H	Ros	L4IH	330	a	TX	Opt	Opt	32	42½x2½	58x3	N
36	358	5.1	254	38.4	110-2800	F	G	A	7-2 11/16	12½	FP	Wa	Ma	M	DR	DR	P.BB	Ch	Blo	Tim 35000H	Ros	L4IH	376	a	TD	Opt	Opt	32	42½x2½	58x3	N
37	462	5.0	324	45.9	125-2600	F	G	A	7-3	13⅞	FP	Wa	Str	M	DR	DR	P.BB	Ch	Blo	Tim 35000H	Ros	L4IHV	462	E	FD	Opt	Opt	32	42½x2½	58x3	N
38	215	5.0	142	27.3	72-3000	L	G	A	4-2⅜	6⅜	CC	No	Zen	M	DR	DR	P.BL	Lo	MM	C1F 212	Ros	L4IH	312	pG	TX	89	54	36	47x2¼	50x2½	N
39	215	5.0	142	27.3	72-3000	L	G	A	4-2⅜	6⅜	CC	No	Zen	M	DR	DR	P.BL	Lo	MM	C1F 212	Ros	L4IH	312	pG	TX	117	69	36	47x2¼	50x2½	N
40	215	5.0	142	27.3	72-3000	L	G	A	4-2⅜	6⅜	CC	No	Zen	M	DR	DR	P.BL	Lo	MM	C1F 304	Ros	L4IH	414	pG	TX	135	87	36	47x2¼	50x3	N
41	298	5.2	194	34.0	84-2800	L	G	N	4-2⅝	10¼	CC	Mo	Zen	M	DR	DR	P.BB	Pe	MM	Cla F308	Ros	L4IH	458	pG	FX	167	99	32	47x2½	60x3	N
42	282	5.0	194	34.0	84-2800	L	G	N	7-2½	10 11/16	CC	No	Zen	M	DR	DR	P.BL	Pe	MM	C1F 304	Ros	L4IH	414	pG	TX	114	66	36	47x2¼	50x3	N
43	282	5.0	194	34.0	84-2800	L	G	N	7-2½	10 11/16	CC	No	Zen	M	DR	DR	P.BL	Pe	MM	C1F 304	Ros	L4IH	414	pG	TX	126	78	36	47x2¼	50x3	N
44	282	5.0	194	34.0	84-2800	L	G	N	7-2½	10 11/16	CC	No	Zen	M	DR	DR	P.BL	Pe	MM	C1F 318	Ros	L4IH	490	pG	CX	144	96	36	47x2½	60x3	N
45	361	4.6	240	40.0	98-2500	L	G	N	7-2⅝	12 11/16	CC	Pe	Zen	M	DR	DR	P.BL	Pe	MM	C1F 318	Ros	L4IH	490	pG	CX	147	99	36	47x2½	60x3	N
46	361	4.6	240	40.0	98-2500	L	G	N	7-2⅝	12 11/16	CC	Pe	Zen	M	DR	DR	P.BL	Pe	MM	C1F 318	Ros	L4IH	490	pG	CX	137	89	36	47x2½	60x3	N
47	361	4.6	240	40.0	98-2500	L	G	N	7-2⅝	12 11/16	CC	Pe	Zen	M	DR	DR	P.BL	Pe	MM	Tim 35120	Ros	L4IH	616	G	CX	104	69	36	47x2½	60x3	N
48	383	4.6	252	44.0	105-2500	L	G	N	7-2⅝	12 11/16	CC	Pe	Zen	M	DR	DR	P.BL	Pe	MM	Tim 35120	Ros	L4IH	616	G	CX	104	69	36	47x2½	60x4	N
49	214	4.9	142	27.3	72-3200	L	C	A	4-2⅜	6¾	CC	No	Zen	M	AL	AL	P.BB	GO	Spi	Col 4007	Ros	L4IH	248	G	TX	111	65	34	37x2¼	52x2½	½
50	248	4.9	170	27.3	78-3100	L	C	C	7-2⅜	10 3/16	CC	No	Zen	M	AL	AL	P.BB	GO	Spi	Col 5500A8	Ros	L4IH	365	G	CD	111	65	34	37x2¼	52x2½	½
51	248	4.9	170	27.3	78-3100	L	C	C	7-2⅜	10 3/16	CC	No	Zen	M	AL	AL	P.Li	GO	Spi	Col 5500A9	Ros	L4IH	365	G	CD	141	84	34	37x2¼	52x2½	½
52	311	4.2	196	38.4	73-2400	H	C	N	7-2¾	13 3/16	CC	No	Zen	M	AL	AL	D.BL	GO	Spi	Col 5500A7	Ros	L4IH	365	G	CD	108	69	34	40x2½	54x2½	½
53	311	4.2	196	38.4	73-2400	H	C	N	7-2¾	13 3/16	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Col 5500A7	Ros	L4IHV	365	G	CD	108	69	34	40x2½	54x3	½
54	360	4.5	240	40.8	90-2500	L	G	N	7-2⅝	13	CC	KP	Zen	M	AL	AL	P.Li	GO	Spi	Col 5500A7	Ros	L4IHV	365	G	CD	168	101	34	40x2½	54x3	½
55	311	4.2	196	38.4	73-2400	H	C	N	7-2¾	13 3/16	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu 15582B13	Ros	L4IHV	407	G	CD	142	83	34	40x2½	54x3	½
56	360	4.5	240	40.8	90-2500	L	G	N	7-2⅝	13	CC	KP	Zen	M	AL	AL	P.Li	GO	Spi	Shu 15582B13	Ros	L4IHV	407	G	CD	168	101	34	40x2½	54x3	½
57	381	4.4	276	40.8	106-2600	H	C	N	7-2¾	13 3/16	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu 15582B13	Ros	L4IHV	407	G	CD	142	83	34	40x2½	54x3	½
58	427	4.2	308	45.9	118-2600	H	C	N	7-2¾	13 3/16	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu 15682B11	Ros	L4IHV	407	G	CD	142	83	34	40x2½	54x3	½
59	381	4.4	276	40.8	106-2600	H	C	N	7-2¾	13 3/16	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu 15682B11	Ros	L4IHV	500	G	CD	142	83	34⅛	40x2½	54x3	½
60	427	4.2	308	45.9	118-2600	H	C	N	7-2¾	13 3/16	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu 15692B12	Ros	L4IHV	550	G	CD	142	83	34⅛	40x2½	54x3	½
61	501	4.3	350	48.6	125-2200	H	C	A	7-2¾	13¾	CC	KP	Zen	M	AL	AL	D.Fu	GO	Spi	Shu 15692B12	Ros	L4IHV	550	G	CD	210	125	34¼	40x2½	54x3	½
62	501	4.3	350	48.6	125-2200	H	C	A	7-2¾	13¾	CC	KP	Zen	M	AL	AL	D.Fu	GO	Spi	Shu 15692B12	Ros	Lw4IDV	600	G	CD	210	125	34¼	40x2½	54x3	½
63	753	5.1	505	76.4	240-2800	H	C	A	4-3⅝	9¾	FP	ALaF	Zen	V	DR	DR	dp.BL	GO	Spi	Tim 27452 A1	Ros	Ws4IA	558	G	CD	108	68	32	40x2½	54x3½	½
64	248	4.9	170	27.3	78-3100	L	C	C	7-2⅜	10 3/16	CC	No	Zen	M	AL	AL	P.Li	GO	Spi	Col 5500A9	Ros	L4IH	365	G	CD	141	84	34	37x2¼	54x2½	½
65	361	4.5	240	40.8	90-2500	L	G	N	7-2⅝	13	CC	KP	Zen	M	AL	AL	P.Li	GO	Spi	Shu 15582B13	Ros	L4IHV	407	G	CD	168	101	34	40x2½	54x3	½
66	381	4.4	276	40.8	106-2600	H	C	N	7-2¾	13 3/16	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu15593B12	Ros	L4IHV	407	G	CD	142	83	34	40x2½	54x3	½
67	381	4.4	276	40.8	106-2600	H	C	N	7-2¾	13 3/16	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu15693B12	Ros	Ws4IA	407	G	CD	142	83	34	40x2½	54x3	½
68	427	4.2	308	45.9	118-2600	H	C	N	7-2¾	13 3/16	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu15693B12	Ros	Ws4IA	407	G	CD	168	101	34	40x2½	54x3	½
69	381	4.4	276	40.8	106-2600	H	C	N	7-2¾	13 3/16	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu15693B12	Ros	Ws4IA	500	G	CD	142	83	34½	40x2½	54x3	½
70	427	4.2	308	45.9	118-2600	H	C	N	7-2¾	13 3/16	CC	KP	Zen	M	AL	AL	D.BL	GO	Spi	Shu15693B12	Ros	Ws4IA	550	G	CD	168	101	34½	40x2½	54x3	½
71	501	4.3	364	48.6	135-2200	H	C	A	7-2¾	13¾	CC	KP	Zen	M	AL	AL	D.Fu	GO	Spi	Shu15693B12	Ros	Ws4IA	550	G	CD	192	113	34½	40x2½	54x3	½
72	501	4.3	364	48.6	135-2200	H	C	A	7-2¾	13¾	CC	KP	Zen	M	AL	AL	D.Fu	GO	Spi	Shu15693B12	Ros	Ws4IA	550	G	CD	210	125	34¾	40x2½	54x3	½
73	754	5.1	505	76.4	240-2800	H	C	A	4-3⅝	9¾	FP	ALaF	Zen	V	DR	DR	dp.BL	GO	Spi	Tim 27452A1	Ros	Ws4IA	558	G	CD	180	112	32	40x3	54x3½	½
74	207	5.45	147	26.3	60-3000	H	G	C	3-2¼	5 9/16	PG	No	Car	M	DR	DR	P.Ow	Hr	Own	Own	Own	O4IM	170	p	4I	66⅛	32½	....	36x1¾	54x1¾	N
75	207	5.45	147	26.3	60-3000	H	G	C	3-2¼	5 9/16	PG	No	Car	M	DR	DR	P.Ow	Hr	Own	Own	Own	O4IM	205	p	4I	86⅜	51½	36	36x1¾	45x2¼	N
76	207	5.45	147	26.3	60-3000	H	G	C	3-2¼	5 9/16	PG	No	Car	M	DR	DR	P.Ow	Hr	Own	Own	Own	O4IM	205	p	4I	112⅜	77½	36	36x1¾	45x2¼	N
77	200	4.7	125	24.0	49-2800	L	C	A	3-2⅛	5¾	PG	No	Zen	M	DR	DR	P.BB	Pe	Spi	Own 8F	Ros	L4IH	268	p	TX	96	53	36	38x2¼	50x2½	N
78	214	4.9	142	27.3	72-3200	L	C	A	4-2⅜	6¾	FP	No	Zen	M	DR	DR	P.BB	Pe	Spi	Own 8F	Ros	L4IH	268	p	TX	96	55	36	38x2¼	50x2½	N
79	214	4.9	142	27.3	72-3200	L	C	C	4-2⅜	6¾	FP	No	Zen	M	DR	DR	P.BB	Pe	Spi	Tim 30020H	Ros	L4IH	287	p	TX	Opt	Opt	34	38x2¼	50x2½	½
80	248	5.0	160	27.3	78-3200	L	C	C	7-2⅜	10 3/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L4IH	327	a	TX	Opt	Opt	34	38x2¼	50x2½	½
81	318	4.6	200	36.0	80-2700	L	C	C	7-2⅝	11 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	345	a	TX	134	82	34	40x2½	54x3	½
82	318	4.5	200	36.0	80-2700	L	C	C	7-2⅝	11 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	345	a	TX	134	82	34	40x2½	54x3	½
83	318	4.5	200	36.0	80-2700	L	C	C	7-2⅝	11 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	660	a	TD	144	88	34	40x2½	54x3	½
84	318	4.5	200	36.0	80-2700	L	C	C	7-2⅝	11 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	660	a	TD	144	97	34	40x2½	54x3	½
85	360	4.4	240	40.8	90-2500	L	C	C	7-2⅝	11 11/16	FP	No	Zen	M	DR	DR	D.BL	Pe	Spi	Tim 35000H	Ros	L4IH	768	a	TD	148	94	34	40x2½	54x3	½
86	383	4.5	236	43.3	95-2500	L	C	C	7-2⅝	11 11/16	FP	No	Zen	M	DR	DR	D.BL	Pe	Spi	Tim 26450H	Ros	T4IHV	876	a	TD	132	109	34	46x3	60x3½	½
87	428	4.6	308	45.9	118-2600	H	C	C	7-2⅝	11 11/16	FP	No	Zen	M	DR	DR	D.BL	Pe	Spi	Tim27450TW	Ros	T4IA	921	a	TD	162	109	34	46x3	56x4	½
88	248	5.0	160	27.3	78-3200	L	C	C	7-2⅜	10 3/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 30020H	Ros	L4IHV	380	p	TX	(3)	(3)	34	38x2¼	50x2½	½
89	318	4.6	200	36.0	80-2700	L	C	C	7-2⅝	11 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L4IHV	452	a	TX	(3)	(3)	34	40x2½	54x3	½
90	360	4.4	240	40.8	90-2500	L	C	C	7-2⅝	11 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IHV	578	a	TX	(3)	(3)	34	40x2½	54x3	½
91	428	4.5	308	45.9	118-2600	H	C	C	7-2⅝	11 11/16	FP	No	Zen	M	DR	DR	D.BL	Pe	Spi	Tim 33000H	Ros	L4IHV	660	a	TD	(3)	(3)	34	40x2½	54x3	½
92	500	4.5	340	48.6	138-2500	L	C	A	7-2⅝	13 11/16	FP	No	Zen	M	DR	DR	D.BL	Pe	Spi	Tim 35000H	Ros	L4IHV	768	a	TD	(3)	(3)	34	40x2½	54x3	½
93	511	4.5	384	54.1	127-2300	L	G	A	7-3	13 11/16	FP	No	Zen	M	DR	DR	dp.BL	Pe	Spi	Tim 26450W	Ros	Ws4IA	921	a	TD	(3)	(3)	34	46x3	60x3½	½
94	228	4.4	142	27.3	59-2800	L	G	C	7-2⅛	10 3/16	FP	No	Zen	M	DR	DR	P.BB	GO	Spi	Tim 30000H	Ros	L4IH	269	a	XF	106½	58½	34	40x2½	54x2½	½
95	263	4.4	164	31.5	68-2800	L	G	C	7-2⅛	10 3/16	FP	No	Zen	M	DR	DR	P.BB	Pe	Spi	Tim 30000H	Ros	L4IH	269	a	XF	106½	56½	34	40x2½	54x2½	½
96	263	4.4	170	33.7	73-2800	L	G	C	7-2¼	11	FP	No	Zen	M	DR	DR	P.BB	Pe	Spi	Tim 31000H	Ros	L4IH	282	a	XF	130½	78½	33½	40x2½	54x3	½
97	339	4.4	224	38.4	94-2800	L	G	C	7-2½	12	FP	Ha	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	353	a	DF	121	70	33½	42x2½	54x3	½
98	383	4.7	265	43.3	106-2800	L	G	C	7-2⅝	12⅛	FP	Ha	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	395	a	DF	131	79½	34	42x2½	56x3	½
99	383	4.7	265	43.3	106-2800	L	G	C	7-2⅝	12⅛	FP	Ha	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35000H	Ros	L4IH	484	a	DF	131	79½	34	42x2½	56x3	½
100	529	4.4	350	51.3	114-2200	L	G	C	7-3	12⅛	FP	Ha	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 26450H	Ros	L4IH	692	a	DF	132	78	33	46x3	60x4	½
101	228	5.0	148	27.3	63-2800	L	G	C	7-2⅛	10 11/16	PC	No	Zen	M	AL	AL	P.BB	Mo	Spi	Cla F212	Ros	L4IH	224	a	TX	93	51½	34	42x2	50x2½	½
102	228	5.0	148	27.3	63-2800	L	G	C	7-2⅛	10 11/16	PC	No	Zen	M	AL	AL	P.BB	Mo	Spi	Cla F212	Ros	L4IH	224	a	TX	93	51½	34	42x2	50x2½	½
103	228	5.0	148	27.3	63-2800	L	G	C	7-2⅛	10 11/16	PC	No	Zen	M	AL	AL	P.BB	Mo	Spi	Cla F212	Ros	L4IH	252	a	TX	93	51½	34	42x2	50x2½	½
104	228	5.0	148	27.3	63-2800	L	G	C	7-2⅛	10 11/16	PC	No	Zen	M	AL	AL	P.BB	Mo	Spi	Cla F212	Ros	L4IH	252	a	TX	96	54	34	42x2	50x2½	½
105	263	5.4	164	31.5	68-2800	L	G	A	7-2⅛	10 11/16	PC	No	Zen	M	AL	AL	P.BB.	Mo	Spi	Cla F308	Ros	L4IH	350	a	TX	126	72	34	42x2½	53x2½	½
106	228	5.0	148	27.3	63-2800	L	G	C	7-2⅛	10 11/16	PC	No	Zen	M	AL	AL	P.BB	Mo	Spi	Cla F212	Ros	L4IH	335	a	TX	126	72	34	42x2½	53x2½	½
107	282	5.35	176	33.7	73-2800	L	G	A	7-2⅛	10 11/16	PC	Ha	Zen	M	AL	AL	P.BB	Mo	Spi	Cla F308	Ros	L4IH	350	a	TX	128	72	34	42x2½	53x2½	½
108	263	5.4	164	31.5	68-2800	L	G	A	7-2⅛	10 11/16	PC	No	Zen	M	AL	AL	P.BB	Mo	Spi	Cla F308	Ros	L4IH	350	a	TD	126	72	34	42x2½	53x2½	½
109	263	5.4	164	31.5	68-2800	L	G	A	7-2⅛	10 11/16	PC	No	Zen	M	AL	AL	P.BB	Mo	Spi	Cla F308	Ros	L4IH	350	a	TD	126	72	34	42x2½	53x2½	½
110	339	5.0	232	38.4	103-2800	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	AL	AL	P.BB	GO	Spi	Cla F308	Ros	L4IHV	350	a	TD	117	74¾	34	42x2½	53x2½	½
111	263	5.3	176	33.7	73-2800	L	G	A	7-2⅛	10 11/16	PC	No	Zen	M	AL	AL	P.BB.	Mo	Spi	Cla F308	Ros	L4IH	350	a	TD	126	72	34	45½x2½	53x3	½
112	339	5.0	232	38.4	103-2800	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	AL	AL	P.BB	GO	Spi	Shu 15582B	Ros	L4IHV	408	a	TD	114	71¾	34	42x2½	56x3	½
113	339	5.0	232	38.4	103-2800	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	AL	AL	P.BB	GO	Spi	Cla F308	Ros	L4IHV	408	a	TD	117	74¾	34	45½x2½	56x3	½
114	428	4.4	290	45.9	93-2200	L	G	C	7-3	14	PC	Ha	Zen	M	AL	AL	P.BB	GO	Spi	Shu 15582B	Ros	L4IHV	499	a	TD	120	79½	34	45½x2½	56x3	½
115	384	5.0	258	43.3	107-2800	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	AL	AL	P.BB	GO	Spi	Shu 15682B	Ros	L4IHV	499	a	TD	120	79½	34	45½x2½	56x3	½
116	501	4.4	330	48.6	117-2800	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	AL	AL	D.Co	GO	Spi	Shu 15682B	Ros	L4IHV	499	a	TD	138	89½	34	45½x2½	56x3	½
117	529	4.4	350	51.3	114-2200	L	G	C	7-3	12¾	PC	Ha	Zen	M	AL	AL	D.Co	GO	Spi	Shu 678-28	Ros	L4IHV	552	a	TD	138	89½	34	46x3	56x3½	½
118	529	4.4	350	51.3	114-2200	L	G	C	7-3	12¾	PC	Ha	Zen	M	AL	AL	D.Co	GO	Spi	Shu 678-28	Ros	Ws 41A	...	a	TD	138	89½	34	46x3	56x3	½
119	707		455	60.0	148-2000	L	G	C	4-2¾	17	PC	Ha	Zen	M	AL	AL	D.BL	GO	Spi	Shu 678-28	Ros	Ws 41A	...	a	TD	Opt	Opt	34	46x3	50x4	½
120	299	4.9	198	33.7	85-2800	L	G	C	4-2⅜	9½	PC	Mo	Til	M	AL	AL	D.BL	Pe	Blo	Tim 33000H	Ros	L4IHV	375	a	FD	120	77¼	34	42x2½	50x3	½
121	190	5.5	130	23.4	70-3000	L	C	A	4-2⅛	5	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	107	c	TX	52½	25¾	44⅜	36x1½	53½x1½	N
122	201	5.8	130	23.4	70-3600	L	C	A	4-2⅛	5 11/16	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	111	c	TX	52½	25¾	44⅜	36x1½	53½x1½	N
123	201	5.5	130	23.4	70-3600	L	C	S	4-2⅛	5	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	107	c	TX	60 11/16	33 11/16	44 3/16	36x1½	53½x1½	N

Line Number	MAKE AND MODEL	GENERAL (See Keynote): Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight	Chassis Wt. (Stripped)	TIRE SIZE: Front	Rear	MAJOR UNITS: ENGINE: Make and Model	No. of Cylinders Bore and Stroke	TRANSMISSION: Make and Model	Location and Forward Speeds	Aux. Location and Speeds	REAR AXLE: Make and Model	Gear and Type	Drive and Torque	GEAR RATIOS: In High	In Low	FRAME: Side Rail Dimensions	Type
1	Dodge Bros. KCL	Com'l	395	119	119	....	1815	B5.25/17	B5.25/17	Own	6-3⅛x4⅜	Own	U 3	No	Own	S½	H	4.11	11.5	5 5/32x2 5/32x⅛	X
2	(Concluded) H20	¾-1	502	131	157	6075	2667	B7.00/20	B7.00/20	Own	6-3¼x4⅜	Own	U 4	No	Own	SF	H	5.85	37.4	6 11/32x2 5/32x 11/32	C
3	K20	¾	525	131	...	5500	2559	B6.00/20	P32x6	Own	6-3¼x4⅜	Own	U 4	No	Own	SF	H	4.87	31.2	6 11/32x2 5/32x 11/32	C
4	K-20X	1	525	131	...	6075	2612	B6.00/20	P32x6	Own	6-3¼x4⅜	Own	U 4	No	Own	SF	H	4.87	31.2	6 11/32x2 5/32x 11/32	C
5	K22	1	***	140	...	7800	2710	B7.00/20	B7.00/20	Own	6-3⅜x4⅜	Own	U 5	No	Own	SF	H	5.66	40.0	8 5/32x2 11/32x 7/32	C
6	H30	1½-2	490	131	157	8400	2612	B6.00/20	P32x6	Own	6-3¼x4⅜	Own	U 4	No	Own	SF	H	5.85	37.4	6 11/32x2 5/32x 11/32	C
7	K30	1½-2	525	131	...	8400	2667	B6.00/20	P32x6	Own	6-3¼x4⅜	Own	U 4	Op	Own	SF	H	4.87	31.2	6 11/32x2 5/32x 11/32	C
8	KD-30	1½-2	525	136	161	8400	2612	B6.00/20	P32x6	Own	6-3¼x4⅜	Own	U 4	Op	Own	SF	H	4.87	31.2	6 11/32x2 5/32x 11/32	C
9	K32	1½-3	525	136	161	10500	2885	B6.00/20	P32x6	Own	6-3⅜x4⅜	Own	U 4	Op	Own	SF	H	5.66	36.2	7x2 11/32x 7/32	C
10	KD32	1½-3	***	136	161	10500	2858	B6.00/20	P32x6	Own	6-3⅜x4⅜	Own	U 4	Op	Own	SF	H	5.66	36.2	7x2 11/32x 7/32	C
11	KS32	1½-3	***	136	161	10500	2866	B6.00/20	P32x6	Own	6-3⅜x4½	Own	U 4	Op	Own	SF	H	5.66	36.2	7x2 11/32x 7/32	C
12	H33	1½-3	795	136	165	11000	3350	B7.00/20	DB7.00/20	Own	6-3¼x4⅜	Own	U 4	No	Own	SF	H	6.37	40.8	8 5/32x2¾x 5/32	C
13	K35	1½-4	845	140	169	12500	3580	B6.50/20	DB6.50/20	Own	6-3⅜x4⅜	Own	U 5	Op	Own	SF	H	6.33	44.7	8 5/32x2 11/32x 7/32	C
14	KZ35	1½-4	***	140	169	12500	3780	B7.00/20	DB7.00/20	Own	6-3⅜x5	Own	U 5	Op	Own	SF	H	6.33	44.7	8 5/32x2 11/32x 7/32	C
15	H43	2-3	795	136	165	11000	3350	B7.00/20	DB7.00/20	Own	6-3¼x4⅜	Own	U 5	No	Own	SF	H	6.37	46.0	8 5/32x2¾x 5/32	C
16	K45	2-4	845	140	169	12500	3675	B7.00/20	DB7.00/20	Own	6-3⅜x4⅜	Own	U 5	Op	Own	SF	H	6.33	44.7	8 5/32x2 11/32x 7/32	C
17	KZ45	2-4	***	140	169	12500	3780	B7.00/20	DB7.00/20	Own	6-3⅜x5	Own	U 5	Op	Own	SF	H	6.33	44.7	8 5/32x2 11/32x 7/32	C
18	F40	2-4	1995	150	190	16000	5173	B6.50/20	DB6.50/20	Own	6-3⅜x5	Own	U 4	Op	Own	SF	H	6.37	43.7	9 11/16x3¼x 5/32	C
19	K40	2-5	***	150	190	19000	5344	P32x6	DP32x6	Own	6-3⅜x5	Own	U 4	Op	Own	SF	H	6.37	43.7	9 11/16x3¼x 5/32	C
20	(5) F-61	3-5½	2575	170	195	20000	5789	P32x6	DP32x6	Own	6-3⅜x5	Own	U 4	Op	Own	SF	H	7.12	48.8	10x3¼x 7/32	C
21	(5) K-61	3-6	***	170	195	22000	5789	P32x6	DP32x6	Own	6-3⅜x5	Own	U 4	Op	Own	SF	H	7.12	48.8	10x3¼x 7/32	C
22	G-80	4-8	5250	146	220	25000	7640	B9.75/20	DB9.75/20	Own	8-3¼x5	Own	U 5	Op	Own	SF	H	7.71	62.7	10 5/32 3 7/32x¼	C
23	Duplex S	3	***	160	Op	15000	6000	B8.25/20	DB8.25/20	Bud K325	6-3 11/16x4¾	BL 2352	U 5	No	Tim 65200	WF	H	6.75	36.2	6x3½x¼	C
24	SAC	4	***	172	Op	18000	7400	B9.75/20	DB9.75/20	Bud K428	6-4⅛x4¾	BL 3353	U 5	No	Tim 75733	WF	R	8.50	81.0	7x3½x¼	C
25	K	5	***	172	Op	21000	8000	B10.50/20	DB10.50/20	Bud L525	6-4⅝x5¼	BL 5351	U 5	No	Tim 76733	w2F	R	Opt	Opt	8x3½x¼	C
26	M	5-7	***	168	Op	28000	10000	P34x7	DS36x7	Bud GL6	6-4⅝x6	BL 70	A 7	No	Tim 68700	WF	R	Opt	Opt	9⅛x3½x 11/32	C
27	Esco 234	2-2½	2860	165	205	15000	5900	B7.50/20	DB7.50/20	Con E603	6-4¼x4¾	Cl 105R	U 5	No	Cla B642	BF	H	5.75	40.7	6x3x¼	C
28	Fageol 102	1½-2½	1350	148	172	11200	4000	B6.00/20	DB6.00/20	Wau ZK	6-3¼x4¼	WG T9	U 4	No	Tim 53200H	BF	H	5.66	36.2	6x3x 7/32	C
29	106BK	1½-2½	1700	161	195	11200	4800	B6.50/20	DB6.50/20	Wau 6BK	6-3¾x4¼	WG T9	U 4	No	Tim 53200	BF	H	5.66	36.2	6x3x 7/32	C
30	106RA	1½-2½	1825	161	195	12700	4900	B6.50/20	DB6.50/20	Wau 6BK	6-3¾x4¼	WG T9	U 4	No	Tim 54200	BF	H	5.83	37.3	6x3x 7/32	C
31	135HP	2-3	2250	161	195	13400	5400	B7.50/20	DB7.50/20	Wau 6-90	6-3⅝x4¾	BL 234	U 4	No	Tim 54200H	BF	E	6.8	43.6	6x3x 7/32	C
32	135RA	2-3	2400	161	195	13400	5600	B7.50/20	DB7.50/20	Wau 6-90	6-3⅝x4¾	BL 234	U 4	No	Tim 56200H	BF	H	7.4	47.4	6x3x 7/32	C
33	135SC	2-3	2150	161	210	14700	5100	B7.50/20	DB7.50/20	Wau 6-90	6-3⅝x4¾	BL 234	U 4	No	Tim 54200H	BF	H	6.8	43.6	6x3x 7/32	C
34	135BK	2-3	2050	161	195	13400	5250	B7.50/20	DB7.50/20	Wau 6BK	6-3¾x4¼	WG T9	U 4	No	Tim 54200	BF	H	5.83	37.3	6x3x 7/32	C
35	250HP	2½-4	3000	178	196	16300	6500	B8.25/20	DB8.25/20	Wau 6-110	6-4x4¾	BL 524	U 4	No	Tim 56200H	BF	H	7.4	53.9	8x3x¼	T
36	250MS	2½-4	2700	178	196	16300	6175	B8.25/20	DB8.25/20	Wau 6MS	6-3¾x4¾	BL 334	U 4	No	Tim 56200H	BF	H	7.4	45.4	8x3x¼	T
37	250MK	2½-4	2750	178	196	16300	6200	B8.25/20	DB8.25/20	Wau 6MK	6-4⅛x4¾	BL 334	U 4	No	Tim 56200H	BF	H	7.4	45.4	8x3x¼	T
38	250RA	2½-4	3150	178	196	19500	6700	B8.25/20	DB8.25/20	Wau 6-110	6-4x4¾	BL 524	U 4	No	Tim 58200H	BF	H	7.8	56.8	8x3x¼	T
39	250SC	2½-4	2925	178	230	17500	6200	B8.25/20	DB8.25/20	Wau 6-110	6-4x4¾	BL 524	U 4	No	Tim 56200H	BF	H	7.4	53.9	8x3x¼	T
40	300HP	3-5	3500	178	196	20700	7200	B9.00/20	DB9.00/20	Wau 6-110	6-4x4¾	BL 524	U 4	No	Tim 58200H	BF	R	7.8	56.8	8x3x¼	T
41	300RA	3-5	3775	178	196	25300	7700	B9.00/20	DB9.00/20	Wau 6-110	6-4x4¾	BL 524	U 4	No	Tim 65725H	WF	R	7.8	56.8	8x3x¼	T
42	370HP	5-6	5000	182	200	25300	9700	B9.75/20	DB9.75/20	Wau 6-125	6-4⅝x5⅛	BL 734	U 4	A 3	Tim 65725H	WF	R	5.7	120.	7⅛x3½x 5/16	C
43	370SR	5-6	4850	182	200	25300	9500	B9.75/20	DB9.75/20	Wau 6SRK	6-4⅝x5⅛	BL 734	U 4	A 3	Tim 65725H	WF	R	5.7	120.4	7⅛x3½x 5/16	C
44	370RA	5-6	5250	182	200	31000	9950	B9.75/20	DB9.75/20	Wau 6-125	6-4⅝x5⅛	BL 734	U 4	A 3	Tim66720DH	WF	R	5.5	116.	7⅛x3½x 5/16	C
45	470HP	6-7	5500	182	200	33500	10100	B9.75/20	DB9.75/20	Wau 6-125	6-4⅝x5⅛	BL 734	U 4	A 3	Tim66720DH	WF	R	5.5	116.	7⅛x3½x 5/16	C
46	Federal DM	......	975	120	120	8000	3050	B6.00/20	P32x6	Con W10	4-3⅞x4¼	WG T9	U 4	No	Cla B374	SF	H	5.67	38.2	6x2¾x¼	D
47	15	1½	745	137	174	10000	3500	B6.00/20	P32x6	Her JXA	6-3⅜x4¼	WG T9	U 4	No	Cla B374	SF	H	6.38	40.8	8½x2⅞x 7/32	T
48	15X	1½	845	137	174	10000	3500	B6.00/20	P32x6	Her JXA	6-3⅜x4¼	WG T9	U 4	No	Cla B374	SF	H	6.38	40.8	8½x2⅞x 7/32	T
49	18X	2	845	137	187	11000	3800	P6.00/20	DB6.00/20	Her JXA	6-3⅜x4¼	WG T9	U 4	No	Cla B484	SF	H	6.88	44.0	8½x2⅞x 7/32	T
50	20	2	1095	137	187	12000	3900	B6.50/20	DB6.50/20	Her JXB	6-3⅜x4¼	WG T9	U 4	No	Tim 54300H	SF	H	6.80	43.5	8½x2⅞x 7/32	T
51	25	2½	1395	137	201	14000	4500	B7.00/20	DB7.00/20	Her JXC	6-3½x4¼	Cla R110	U 5	No	Cla B640	SF	H	6.38	45.2	8½x2⅞x 7/32	T
52	T3W	2½	1595	148	185	14000	5110	P32x6	P36x8	Wau V	4-4x5	Own 7754	A 4	No	Tim 64603H	W½	R	7.25	36.3	6x3½x¼	C
53	T3WFA	2½-3	1795	148	185	16000	5400	P32x6	DP32x6	Wau V	4-4x5	Own 7754	A 4	No	Tim 65001H	WF	R	8.75	43.8	6x3½x¼	C
54	30	2½-3	2095	175	237	16000	6050	B8.25/20	DB8.25/20	Wau 6MS	6-3¾x4¾	Cla R108	U 5	No	Cla B642	SF	H	6.43	45.5	10x3½x¼	T
55	40	3½-4	2490	175	237	19000	6550	B9.00/20	DB9.00/20	Wau 6MK	6-4⅛x4¾	Cla R908	U 5	No	Tim 58200H	SF	H	6.83	55.5	10x3½x¼	T
56	40DR	3½-4	2615	175	237	19000	6550	B9.00/20	DB9.00/20	Wau 6MK	6-4⅛x4¾	Cla R908	U 5	No	Tim 75200H	2F	H	7.0	56.9	10x3½x¼	T
57	T10B	3½-4	2550	165	230	19000	6550	P34x7	DP34x7	Con 18R	6-4x4½	Own 7784	A 4	No	Tim 58200H	SF	R	6.83	44.5	7½x3½x 7/32	C
58	T10DR-T10W	3½-4	2685	165	230	19000	6550	P34x7	DP34x7	Con 18R	6-4x4½	Own 7784	A 4	No	Tim 65200H	w/2F	R	6.75	44.0	7½x3½x 7/32	C
59	A600T	3-3½	2045	157	206	17000	6100	B8.25/20	DB8.25/20	Con E601	6-3⅝x4½	Own 7784	A 4	No	Tim 58000H	SF	H	7.8	50.8	6x3½x¼	P
60	A600TDR-A600TW	3-3½	2180	157	206	17000	6100	B8.25/20	DB8.25/20	Con E601	6-3⅝x4½	Own 7784	A 4	No	Tim 65001H	w/2F	H	7.5	48.9	6x3½x¼	P
61	U6-U6DR	4½-5	3860	165	230	22000	7420	P36x8	DP36x8	Con 20R	6-4⅛x4¾	Cla B 710	A 5	No	Tim 65706H	w/2F	R	7.75	50.4	7½x3½x¼	C
62	C7-C7W	6	4710	195	249	26000	9550	B9.75/20	DB9.75/20	Con 21R	6-4⅜x4¾	Cla B 710	A 5	No	Tim 76736H	w/2F	R	7.89	51.3	7⅝x3½x 5/16	P
63	C8-C8W	6	5120	195	249	26000	9650	B9.75/20	DB9.75/20	Con 21R	6-4⅜x4¾	Cla B 710	A 5	No	Tim 76736W	w/2F	R	7.89	51.3	7⅝x3½x 5/16	P
64	X8DR-X8	7½	4335	162	186	30000	9750	S36x6	S40x14	Con B7	4-5x6	Cla B 710	A 5	No	Tim 68700DP	w/2F	R	11 7	76.0	9⅛x3½x 11/32	C
65	X8RDR-X8R	7½	4735	162	186	30000	10475	P40x8	DP40x8	Con 21R	6-4⅜x4¾	Cla B 710	A 5	No	Tim 68702DP	w/2F	R	11.7	76.0	9⅛x3½x 11/32	C
66	Ford Comm.	3950Lb.	335	112	112	....	1650	B5.50/17	B5.50/17	Own	4-3⅞x4¼	Own	U 3	No	Own	S¾	U	4.11	11.5	6x1¾x.105	C
67	Truck (14)	1½	470	131	131	....	2770	B6.00/20	P32x6	Own	4-3⅞x4¼	Own	U 4	No	Own	S¾	U	6.6	42.2	7x2¾x 7/32	C
68	Truck (14)	1½	490	157	157	....	2880	B6.00/20	P32x6	Own	4-3⅞x4¼	Own	U 4	No	Own	S¾	U	6.6	42.2	7x2¾x 7/32	C
69	Truck (14)	1½	500	131	131	....	2858	B6.00/20	P32x6	Own	8-3 1/16x3¾	Own	U 4	No	Own	S¾	U	6.60	42.2	7x2¾x 7/32	C
70	Truck (14)	1½	520	157	157	....	2968	B6.00/20	P32x6	Own	8-3 1/16x3¾	Own	U 4	No	Own	S¾	U	6.60	42.2	7x2¾x 7/32	C
71	Comm.	3950Lb.	360	112	112	....	1730	B5.50/17	B5.50/17	Own	8-3 1/16x3¾	Own	U 3	No	Own	S¾	U	4.11	11.5	6x1¾x.105	C
72	General Mot. (6) T18	1½-2	645	131	157	8500	3130	P30x5	P32x6	Own 221	6-3 5/16x4⅛	Own	U 4	No	Own	S½	U	5.43	35.7	7 5/32x2⅜x¼	T
73	T-18	1½-2	625	140	164	9500	3190	P30x5	P32x6	Own 221	6-3 5/16x4⅛	Own	U 4	No	Own	SF	H	5.67	37.3	7 5/32x2⅜x¼	T
74	T23	2-3	795	131	166	10500	3420	B6.50/20	DB6.50/20	Own 221	6-3 5/16x4⅛	Own	U 4	Op	Own	SF	H	5.67	37.3	7 5/32x2⅜x¼	T
75	T-23	2-3	790	140	164	11000	3480	B6.50/20	DB6.50/20	Own 221	6-3 5/16x4⅛	Own	U 4	No	Own	SF	H	5.67	37.3	7 5/32x2⅜x¼	T
76	T-33	2-3	1160	142	184	12500	4320	B6.50/20	DB6.50/20	Own 221	6-3 5/16x4⅛	Own	U 4	No	Own	SF	H	5.63	37.0	8x3x¼	T
77	T-33	3-3½	1395	142	184	14000	4470	P32x6	DP32x6	Own 257	6-3 7/16x4⅝	Own	U 4	No	Own	SF	H	5.63	35.5	8x3x¼	T
78	(c.o.e.) T-73	3-3½	2995	94	142	15000	6805	P34x7	DP34x7	Own 257	6-3 7/16x4⅝	Own	U 4	No	Own	SF	H	5.63	34.6	8x3x¼	L
79	T43	3½-4½	1525	142	184	16000	4935	P32x6	DP32x6	Own 257	6-3 7/16x4⅝	Own	U 4	Op	Own	SF	H	6.57	41.4	8x3x¼	T
80	T-43	3½-4½	1595	142	184	16000	4955	P32x6	DP32x6	Own 257	6-3 7/16x4⅝	Own	U 4	No	Own	SF	H	6.57	41.4	8x3x¼	T
81	(T) T-43T	7-9	1995	145	169	29200	5255	P32x6	DP32x6	Own 331	6-3¾x5	Own	U 4	No	Own	SF	H	6.57	40.6	8x3x¼	T
82	T51	4-5½	2480	155	200	19000	6090	P34x7	DP34x7	Own 331	6-3¾x5	Own	U 4	No	Own	SF	R	6.57	40.6	9x3½x 7/32	TL
83	T-51	4-5½	2480	155	200	19000	6110	P34x7	DP34x7	Own 331	6-3¾x5	Own	U 4	No	Own	SF	R	6.57	40.6	9x3½x 7/32	TL
84	T-51	4-5½	2775	145	193	20000	6960	P34x7	DP34x7	Own 331	6-3¾x5	Own	U 4	No	Own	SF	R	6.57	40.6	9x3½x 7/32	L
85	T-51W	5-6½	2770	154	200	22000	7110	P34x7	DP34x7	Own 331	6-3¾x5	Own	U 4	Op	Own	WF	R	8.50	52.5	9x3½x 7/32	TL
86	T-51W	5-6½	2895	145	193	23000	7815	P34x7	DP34x7	Own 331	6-3¾x5	Own	U 4	Op	Own	WF	R	8.50	52.5	9x3½x 7/32	L
87	T-51H	5-6½	2800	154	200	22000	7010	P34x7	DP34x7	Own 331	6-3¾x5	Own	U 4	Op	Own	2F	R	8.50	52.5	9x3½x 7/32	TL
88	T-51H	5-6½	3095	145	193	23000	7745	P34x7	DP34x7	Own 331	6-3¾x5	Own	U 4	Op	Own	2F	R	8.50	52.5	9x3½x 7/32	L
89	(c.o.e.) T-75	5-6½	4995	94	160	24000	9360	B9.75/20	DB9.75/20	Own 331	6-3¾x5	Own	U 5	No	Own	2F	R	8.50	56.4	9x4x 5/32	L
90	T61	5-6½	3710	154	200	22000	7380	B9.00/20	DB9.00/20	Own 400	6-4⅛x5	Own	U 5	Op	Own	WF	R	8.50	56.4	9x3½x 7/32	TL
91	T-61	5-6½	3710	154	200	22000	7510	B9.00/20	DB9.00/20	Own 400	6-4⅛x5	Own	U 5	Op	Own	WF	R	8.50	56.4	9x3½x 7/32	TL
92	T-61	5-6½	4095	145	193	23000	8390	B9.00/20	DB9.00/20	Own 400	6-4⅛x5	Own	U 5	Op	Own	2F	R	8.64	57.3	9x3½x 7/32	L
93	T83	5-7½	4205	155	201	25000	7765	B9.00/20	DB9.00/20	Own 400	6-4⅛x5	Own	U 5	Op	Own	WF	R	9.00	59.7	9x3½x 7/32	TL
94	T-83	5-7½	4205	155	201	25000	7990	B9.00/20	DB9.00/20	Own 400	6-4⅛x5	Own	U 4	Op	Own	WF	R	9.00	59.7	9x3½x 7/32	TL
95	T-83	5-7½	4985	145	193	26000	8740	B9.00/20	DB9.00/20	Own 400	6-4⅛x5	Own	U 5	Op	Own	2F	R	8.50	56.4	9 5/32x3½x 5/32	L
96	T-84	7-9	5260	145	193	30000	8890	B9.75/20	DB9.75/20	Own 450	6-4⅜x5	Own	U 5	Op	Own	2F	R	8.50	56.4	9 5/32x3½x 5/32	L
97	(c.o.e.) T-78	7-9	5995	94	160	30000	10505	B10.50/22	DB10.50/22	Own 400	6-4⅛x5	Own	U 5	No	Own	2F	R	8.50	56.4	9x4x 5/32	L
98	T-84SX	7½	5175	204	204	25000	9850	B10.50/20	DB10.50/20	Own 400	6-4⅛x5	Own	U 4	No	Own	2F	R	10.1	64.2	9 5/32x4x 5/32	L
99	T85	6-8	5600	171	204	30000	10630	B9.75/20	DB9.75/20	Own 525	6-4½x5½	Own	U 4	Op	Own	2F	R	8.50	53.3	9 5/32x4x 5/32	L
100	T85H	8-9½	6195	171	204	34000	11060	B9.75/20	DB9.75/20	Own 525	6-4½x5½	Own	U 4	Op	Own	2F	R	9.30	58.3	9 5/32x4x 5/32	L
101	T110	10-12	8110	171	204	40000	12800	B10.50/24	DB10.50/24	Own 616	6-4⅞x5½	Own	U 4	A 3	Own	2F	R	9.30	116.	9 5/32x4x 5/32	L
102	Gramm AX4	1-1½	795	131	180	10000	3350	B6.00/20	B6.50/20	Con W10	4-3⅞x4¼	WG T9	U 4	No	Tim 53200H	BF	H	5.66	36.3	6x2¾x¼	C
103	AX6	1-1½	895	131	180	10000	3550	B6.00/20	B6.50/20	Con 25A	6-3⅜x4	WG T9	U 4	No	Tim 53200H	BF	H	5.66	36.3	6x2¾x¼	C
104	BX4	1½-2	895	131	210	11200	3525	B6.00/20	DB6.00/20	Con W10	4-3⅞x4¼	WG T9	U 4	No	Tim 53200H	BF	H	6.2	39.6	6x2¾x¼	L
105	BX6	1½-2	995	131	210	11200	3725	B6.00/20	DB6.00/20	Con 25A	6-3⅜x4	WG T9	U 4	No	Tim 53200H	BF	H	6.2	39.6	6x2¾x¼	L
106	BXF	1½-2	1495	131	210	11200	4000	B6.00/20	DB6.00/20	Lyc ASD	6-3¾x4½	BL 314	U 4	No	Tim 53200H	BF	H	5.6	37	6x2¾x¼	L
107	B	1½	1295	140	196	12000	4150	B6.50/20	DB6.50/20	Lyc 4SL	6-3¼x4½	WG T9	U 4	No	Tim 54200H	BF	H	5.83	37.1	6x2½x¼	C
108	BF	2-3	1695	140	210	12000	4300	B6.50/20	DB6.50/20	Lyc ASD	6-3¾x4½	BL 314	U 4	No	Tim 54200H	BF	H	5.8	37.1	6x2½x¼	C
109	CX4	2-3	1095	131	210	13400	3950	B6.50/20	DB6.50/20	C n W20	4-4⅛x4¼	WG T9	U 4	No	Tim 54200H	BF	H	5.8	37.0	10x2¾x¼	B
110	CX6	2-3	1295	131	210	13400	4150	B6.50/20	DB6.50/20	Con 20C	6-3⅜x4⅜	WG T9	U 4	No	Tim 54200H	BF	H	5.8	37.0	10x2¾x¼	B
111	C	2-3	1795	160	224	14000	4820	B7.00/20	DB7.00/20	Lyc AS	6-3⅝x4½	BL 314	U 4	No	Tim 54200 H	BF	H	5.8	37.1	7x2½x¼	C
112	CXH	2-3	1345	131	210	13400	4300	B6.50/20	DB6.50/20	Her JXC	6-3½x4¼	BL 234	U 4	No	Tim 54200H	BF	H	5.8	37.0	10x2¾x¼	B
113	CF	2-3½	1895	160	224	14000	4900	B7.50/20	DB7.50/20	Lyc ASD	6-3¾x4½	BL 314	U 4	No	Tim 54200H	BF	H	5.8	37.1	7x2½x¼	C
114	CXF	2-3½	2395	160	224	14000	5100	B7.50/20	DB7.50/20	Con 20R	6-4⅛x4¾	BL 554	U 4	No	Tim 54200H	BF	H	5.8	41.6	7x2½x¼	C
115	D	2½-4	1995	160	224	17000	5100	B7.50/20	DB7.50/20	Lyc ASD	6-3¾x4½	BL 314	U 4	No	Tim 56200H	BF	H	6.1	39.0	7x2½x¼	C
116	DF	2½-4	2695	160	260	17000	5300	B7.50/20	DB7.50/20	Con 21R	6-4⅜x4¾	BL 554	U 4	No	Tim 56200H	BF	H	6.1	43.5	7x2½x¼	C
117	EX	3-4	2295	160	224	16300	5200	B8.25/20	DB8.25/20	Con E601	6-3⅝x4½	BL 324	U 4	No	Tim 56200H	BF	H	6.1	43.5	7x2½x¼	C
118	E330	3-4½	2595	160	224	20700	5950	B8.25/20	DB8.25/20	Lyc TS	6-3⅞x5	BL 554	U 4	No	Tim 58200H	BF	H	5.5	35.6	12x2½x¼	P
119	ED	3-4½	3995	160	224	20700	6100	B8.25/20	DB8.25/20	Cum Die	4-4⅞x6	BL 554	U 4	No	Tim 58200H	BF	H	5.5	35.6	12x2½x¼	P
120	EY190	3	3595	190	190	16000	6750	B7.50/20	DB7.50/20	Con 20R	6-4⅛x4¾	Co Rus4	U 4	No	Tim 58200H	BF	H	4.5	29.1	8¾x3¼x¼	L
121	GY	4	4345	190	210	18000	7700	B8.25/20	DB8.25/20	Con 21R	6-4⅜x4¾	Co Rus	U 4	No	Wis 69317H	2F	H	4.3	27.9	8¾x3¼x¼	L
122	G	4-6	3695	150	225	24000	7950	B9.00/20	DB9.00/20	Con 21R	6-4⅜x4¾	BL 554	U 4	No	Wis 1237H	2F	H	6.8	49.0	12x2½x¼	P
123	(Cont.) GF	4-6	5500	150	225	24000	9050	B9.75/20	B9.75/20	Her HXC	6-5¼x6	BL 744	U 4	No	Wis 1237H	2F	H	4.29	15.8	12x2½x¼	P

Line Number	Engine Details: Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	Main Bearings: Number and Diameter	Main Bearings: Length	Oiling System Type	Governor Make	Fuel Syst.: Carburetors Make	Fuel Syst.: Fuel Feed	Electrical: Ignition System Make	Electrical: Generator, Starter Make	Clutch Type and Make	Radiator Make	Universals Make	Front Axle: Make and Model	Steering Gear Make	Brakes: Service: Make, Location Type, Operation	Brakes: Service: Lining Area	Brakes: Service: Drum Material	Brakes: Hand Location, Type	Body Mounting Data: Cab to Rear of Frame	Body Mounting Data: Cab to Rear Axle	Body Mounting Data: Width of Frame	Springs: Front	Springs: Rear	Springs: Auxiliary Type
1	201	5.8	136	23.4	70-3000	L	C	A	4-2¼	5 11/16	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	111	c	TX	60 11/16	33 1/16	44 1/16	36x1¼	53½x1½	N
2	201	5.0	132	23.4	62-3000	L	C	S	4-2¼	5	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	176	a	TX	94 11/16	46 1/16	33 11/16	36x1¾	48x2¼	N
3	217	5.6	150	25.3	70-3000	L	C	S	4-2½	5 11/16	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	176	a	TX	94 11/16	46 1/16	33 11/16	36x1¾	48x2¼	N
4	217	5.6	150	25.3	70-3000	L	C	S	4-2½	5 11/16	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	176	a	TX	94 11/16	46 1/16	33 11/16	36x1¾	48x2¼	N
5	242	5.4	170	27.3	85-3200	L	C	A	4-2½	6¼	CC	MoHa	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	232	a	TX	91 1/16	55 1/16	34	39x2	48x2¼	N
6	201	5.0	132	23.4	62-3000	L	C	S	4-2¼	5	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	176	a	TX	94 11/16	46 1/16	33 11/16	36x1¾	48x2¼	N
7	217	5.6	150	25.3	70-3000	L	C	S	4-2½	5 11/16	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	176	a	TX	94 11/16	46 1/16	33 11/16	36x1¾	48x2¼	N
8	217	5.6	150	25.3	70-3000	L	C	S	4-2½	5 11/16	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	176	a	TX	99 11/16	51 1/16	34	36x1¾	48x2¼	N
9	217	5.6	150	25.3	70-3000	L	C	S	4-2½	5 11/16	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	176	a	TX	99 11/16	51 1/16	34	36x1¾	48x2¼	N
10	201	5.8	136	23.4	70-3000	L	C	A	4-2¼	5 11/16	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	176	a	TX	99 11/16	51 1/16	34	36x1¾	48x2¼	N
11	242	5.4	170	27.3	85-3200	L	C	A	4-2½	6¼	CC	MoHa	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	176	a	TX	99 11/16	51 1/16	34	36x1¾	48x2¼	N
12	217	5.1	148	25.3	77-3200	L	C	S	4-2¼	5.34	CC	Ha	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	230	a	TX	87½	51 1/16	37 11/16	39x2	48x2¼	½
13	242	5.4	170	27.3	85-3200	L	C	A	4-2½	6¼	CC	MoHa	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	232	a	TX	91 1/16	55 1/16	34	39x2	48x2¼	½
14	309	4.7	200	31.5	96-3000	L	G	S	7-2⅝	11¾	CC	Mo	Det	M	DR	DR	P.BB	Lo	Own	Own	Own	O4IH	232	a	TX	91 1/16	55 1/16	34	39x2	48x2¼	½
15	217	5.1	148	25.3	77-3200	L	C	S	4-2¼	5.34	CC	Ha	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	230	a	TX	87½	51½	37 11/16	39x2	48x2¼	½
16	242	5.4	170	27.3	85-3200	L	C	A	4-2½	6¼	CC	MoHa	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O4IH	232	a	TX	91 1/16	55 1/16	34	39x2	48x2¼	½
17	309	4.7	200	31.5	98-3000	L	G	S	7-2⅝	11¾	CC	Mo	Det	M	DR	DR	P.BB	Lo	Own	Own	Own	O4IH	232	a	TX	91 1/16	55 1/16	34	39x2	48x2¼	½
18	309	4.7	200	31.5	98-3000	L	G	S	7-2⅝	11¾	CC	Mo	Det	M	DR	DR	P.BB	Lo	Own	Own	Jac	O4IH	348	a	CD	124 11/16	69¾	33 11/16	42x3	56½x3½	½
19	309	4.7	200	31.5	98-3000	L	G	S	7-2⅝	11¾	CC	Mo	Det	M	DR	DR	P.BB	Lo	Own	Own	Jac	O4IH	348	a	CD	124 11/16	69¾	33 11/16	42x3	56½x3½	½
20	309	4.7	200	31.5	98-3000	L	G	S	7-2⅝	11¾	CC	Mo	Det	M	DR	DR	P.BB	Lo	Own	Own	Jac	O4IH	416	a	CD	149 11/16	89¾	34	42x3	56x3½	½
21	309	4.7	200	31.5	98-3000	L	G	S	7-2⅝	11¾	CC	Mo	Det	M	DR	DR	P.BB	Lo	Own	Own	Jac	O4IH	416	a	CD	149 11/16	89¾	34	42x3	56x3½	½
22	385	5.0	260	39.2	115-3000	L	G	S	9-2¾	13	CC	No	Str	M	DR	DR	P.BB	Lo	Own	Own	Jac	O4IH	600	a	CD	99 11/16	65 11/16	34 1/16	42x3	56x3½	½
23	330	4.5	213	33.7	61-2100	L	G	C	7-3r	9⅞	FP	No	Str	P	AL	AL	D.BL	Mo	Cle	Shu 5510	Ros	L4IHV	665	a	TD	Opt	80	34	39x2½	50x2½	N
24	428	4.5	280	45.9	102-2400	L	G	C	7-3r	9⅞	FP	No	Str	P	AL	AL	D.BL	Yo	Cle	Shu 5550	Ros	L4IHV	775	a	TD	Opt	80	34	39x2½	52x3	½
25	525	4.5	348	48.6	111-2200	L	G	C	7-3	11½	FP	Mo	Str	P	AL	AL	D.BL	Yo	Cle	Shu 637	Ros	L4IHV	855	a	TD	Opt	80	34	39½x3	52x3½	½
26	572	4.5	358	48.6	105-2200	L	G	C	7-3	10 11/16	FP	Mo	Str	V	AL	AL	D.BL	Mo	Cle	Shu 655	Ros	T2IA	495	a	....	Opt	89	38½	42x3	56x4	N
27	382	4.6	250	43.3	95-2500	L	G	N	7-2⅝	12 11/16	CC	Ha	Zen	M	DR	DR	P.BB	Yo	Spi	Cla F308	Ros	L4IHV	350	a	TX	136¾	82	34		55¼x3	½
28	222	4.7	142	27.3	62-2800	L	G	A	7-2⅝	6 11/16	FP	No	Zen	M	DR	DR	P.Lo	Pe	Blo	Tim 30010H	Ros	L4IH	257	G	TX	132	77¾	34	32¾x2	50x2½	½
29	282	5.1	190	33.7	82-2800	L	G	A	7-2⅝	10¼	FP	No	Zen	M	DR	DR	P.Lo	PC	Blo	Tim 30000H	Ros	L4IH	257	G	TX	144	81½	34	37x2½	56x3	½
30	282	5.1	190	33.7	82-2800	L	G	A	7-2⅝	10¼	FP	No	Zen	M	DR	DR	P.Lo	PC	Blo	Tim 30000H	Ros	L4IH	257	G	TX	144	81½	34	37x2½	56x3	½
31	255	5.3	182	27.3	90-3200	F	G	A	4-2⅝	7 11/16	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 31000H	Ros	L4IH	306	G	TX	144	81½	34	37x2½	56x3	½
32	255	5.3	182	27.3	90-3200	F	G	A	4-2⅝	7 11/16	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 31000H	Ros	L4IH	355	G	TX	144	81½	34	37x2½	56x3	½
33	255	5.3	182	27.3	90-3200	F	G	A	4-2⅝	7 11/16	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 33020H	Ros	L4IH	306	G	TX	144	81½	34	37x2½	56x3	½
34	282	5.1	190	33.7	82-2800	L	G	A	7-2⅝	10¼	FP	No	Zen	M	DR	DR	P.Lo	PC	Blo	Tim 31000H	Ros	L4IH	306	G	TX	144	81½	34	37x2½	56x3	½
35	358	5.2	254	38.4	110-2800	F	G	A	7-2⅞	12½	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 33020H	Ros	L4IHV	355	G	FD	167⅛	97⅛	34	41x2½	56x3	½
36	315	4.6	200	33.7	70-2200	L	G	A	7-2⅝	12½	FP	No	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 33020H	Ros	L4IHV	355	G	TX	167⅛	97⅛	34	41x2½	56x3	½
37	381	4.4	240	40.8	82-2200	L	G	A	7-2⅝	12½	FP	No	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 33020H	Ros	L4IHV	355	G	TX	167⅛	97⅛	34	41x2½	56x3	½
38	358	5.2	254	38.4	110-2800	F	G	A	7-2⅞	12½	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 33020H	Ros	L4IHV	398	G	FD	167⅛	97⅛	34	41x2½	56x3	½
39	358	5.2	254	38.4	110-2800	F	G	A	7-2⅞	12½	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 35020H	Ros	L4IHV	355	G	FD	168⅛	97⅛	34	41x2½	56x3	½
40	358	5.2	254	38.4	110-2800	F	G	A	7-2⅞	12½	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 35020H	Ros	L4IHV	398	G	FD	167⅛	97⅛	34	41x2½	60⅝x3½	½
41	358	5.2	254	38.4	110-2800	F	G	A	7-2⅞	12½	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 35020H	Ros	L4IHV	484	G	FD	167⅛	97⅛	34	41x2½	60⅝x3½	½
42	462	5.2	324	46.0	125-2600	F	G	A	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 35020H	Ros	L4IHV	484	G	FD	172 1/16	101⅝	33½	41x3	60⅝x3½	½
43	517	4.5	340	51.3	108-2000	L	G	A	7-3	13⅞	FP	No	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 35000H	Ros	L4IHV	484	G	FD	172 1/16	101⅝	33½	41x3	60⅝x3½	½
44	462	5.2	324	46.0	125-2600	F	G	A	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 35000H	Ros	L4IHV	663	G	FD	172 1/16	101⅝	33½	41x3	60⅝x3½	½
45	462	5.2	324	46.0	125-2600	F	G	A	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 26450H	Ros	L4IHV	717	G	FD	172 1/16	101⅝	33½	41x3	60⅝x3½	½
46	200	4.7	126	24.0	50-2700	L	C	A	3-2⅛	5⅞	CC	Mo	Car	M	DR	DR	P.BB	Lo	Spi	Cla F212	Ge	L4IH	200	a	TX	......	......	34	38½x2¼	50x2½	N
47	228	4.7	149	27.3	62-2600	L	G	C	7-2⅛	10 11/16	PC	Mo	Car	M	DR	DR	P.BB	Lo	Spi	Cla F212	Ge	L4IH	250	a	TX	101	51⅛	34	36x2½	50x2½	N
48	228	4.7	149	27.3	62-2600	L	G	A	7-2⅛	10 11/16	PC	Mo	Car	M	DR	DR	P.BB	Lo	Spi	Cla F212	Ge	L4IH	260	a	TX	101	51⅛	34	38x2½	50x2½	½
49	228	4.7	149	27.3	62-2600	L	G	A	7-2⅛	10 11/16	PC	Mo	Car	M	DR	DR	P.BB	Lo	Spi	Cla F212	Ge	L4IH	260	a	TX	101	51⅛	34	38x2½	50x2½	½
50	263	5.4	164	31.5	67-2600	L	G	A	7-2⅛	10 11/16	PC	No	Car	M	DR	DR	P.BB	Lo	Spi	Tim 31020H	Ge	L4IH	336	a	TX	101	51⅛	34	38x2½	50x2½	½
51	282	5.4	176	33.7	72-2600	L	G	A	7-2⅛	10 11/16	PC	No	Car	M	DR	DR	P.BB	Lo	Spi	Cla F308	Ge	L4IH	336	a	TD	101	51⅛	34	38x2½	50x3	½
52	251	4.1	162	25.6	50-2000	L	G	C	3-2⅝	7½	CC	Wa	Zen	V	DR	DR	P.BB	Lo	PS	Own 7720	Ros	L4IH	337	a	TI	119	71	34	38x2½	52x3	½
53	251	4.1	162	25.6	50-2000	L	G	C	3-2⅝	7½	CC	Wa	Zen	V	DR	DR	P.BB	Lo	PS	Own 7720	Ros	L4IHV	379	a	TI	119	71	34	38x2½	52x3	½
54	315	5.0	200	33.8	73-2500	L	G	A	7-2⅝	12⅛	FP	Wa	Zen	M	DR	DR	P.BB	Lo	Spi	Cla F320	Ge	L4IHV	336	a	FD	115	82	34	42x2½	52x3	½
55	381	4.8	240	40.8	85-2400	L	G	A	7-2⅝	12⅛	FP	Wa	Zen	M	DR	DR	P.BB	Lo	Spi	Cla F320	Ros	L4IHV	379	a	FD	115	82	34	42x2½	52x3	½
56	381	4.8	240	40.8	85-2400	L	G	A	7-2⅝	12⅛	FP	Wa	Zen	M	DR	DR	P.BB	Lo	Spi	Cla F320	Ros	L4IHV	379	a	FD	115	82	34	42x2½	52x3	½
57	339	4.2	212	38.4	80-2200	H	C	C	7-2⅝	13 1/16	CC	Mo	Zen	M	DR	DR	P.BB	Lo	PS	Own 7738	Ros	L4IHV	379	a	TI	117	79	34	42x2½	54x3	½
58	339	4.2	212	38.4	80-2200	H	C	C	7-2⅝	13 1/16	CC	Mo	Zen	M	DR	DR	P.BB	Lo	PS	Own 7738	Ros	L4IHV	379	a	TI	117	79	34	42x2½	54x3	½
59	318	4.6	202	36.0	80-2500	L	G	C	7-2⅝	12 11/16	CC	KP	Zen	M	DR	DR	P.BB	Lo	PS	Cla F318	Ros	L4IHV	379	a	TI	113	71	34	40x2½	52x3	½
60	318	4.6	202	36.0	80-2500	L	G	C	7-2⅝	12 11/16	CC	KP	Zen	M	DR	DR	P.BB	Lo	PS	Cla F318	Ros	L4IHV	379	a	TI	113	71	34	40x2½	52x3	½
61	381	4.2	237	40.8	85-2200	H	C	C	7-2⅝	13 1/16	CC	Mo	Zen	M	DR	DR	P.BB	Lo	PS	Own 7720	Ros	L4IHV	463	a	TD	117	79	34	42x2½	54x3	½
62	428	4.2	308	45.9	114-2200	H	C	C	7-2⅝	13 1/16	CC	Mo	Zen	M	DR	DR	P.BL	Lo	Spi	Tim 36020H	Ros	L4IHV	486	a	TD	162	102	34	42x3	56x3½	½
63	428	4.2	308	45.9	114-2200	H	C	C	7-2⅝	13 1/16	CC	Mo	Zen	M	DR	DR	P.BL	Lo	Spi	Tim 36020W	Ha	W4IA	613	a	TD	162	102	34	42x3	56x3½	½
64	471	3.7	288	40.0	61-1350	L	G	C	3-2½	10¾	CC	Pe	Zen	V	AB	DR	P.BB	Lo	PS	Own 5008	Ge	T2IMV	568	a	RI	151	87	38	44x3	56x3½	½
65	428	4.2	308	45.9	114-2200	H	C	C	7-2⅝	13 1/16	CC	Mo	Zen	M	DR	DR	P.BL	Lo	PS	Own 5008	Ros	T2IMV	458	a	RI	151	87	38	44x3	56x3½	½
66	200	4.6	128	24.0	50-2800	L	G	A	3-2	7	PS	Ha	Zen	P	Ow	Ow	P.Ow	Ow	Spi	Own	Own	O4IM	186	a	4I	......	31⅞	44	31 1/16x1¾	44⅝x2¼	N
67	200	4.6	128	24.0	50-2800	L	G	A	3-2	7	PS	Ha	Zen	P	Ow	Ow	P.Lo	Ow	Spi	Own	Own	O4IM	344	a	2I	94 11/16	51¼	38	33x2¼	50x2½	O
68	200	4.6	128	24.0	50-2800	L	G	A	3-2	7	PS	Ha	Zen	P	Ow	Ow	P.Lo	Ow	Spi	Own	Own	O4IM	344	a	2I	120 1/16	76 11/16	38	33x2¼	50x2½	O
69	220	5.5	148	30.0	81-3800	L	G	A	3-2	5 11/16	PS	Mo	Det	P	Ow	Ow	P.Lo	Ow	Spi	Own	Own	O4IM	344	a	2I	109⅜	51 1/16	38	33x2¼	50x2½	O
70	220	5.5	148	30.0	81-3800	L	G	A	3-2	5 11/16	PS	Mo	Det	P	Ow	Ow	P.Lo	Ow	Spi	Own	Own	O4IM	344	a	2I	145⅜	76 11/16	38	33x2¼	50x2½	O
71	220	5.5	148	30.0	81-3800	L	G	A	3-2	5 11/16	PS	Mo	Det	P	Ow	Ow	P.Ow	Ow	Spi	Own	Own	O4IM	186	a	4I	......	31⅞	43	44⅝x2¼	44⅝x2¼	N
72	221	4.6	155	24.3	69-2800	H	G	B	4-2⅜	7 11/16	PC	Op	Zen	M	DR	DR	P.Ow	Hr	Own	Own	Jac	O4IM	186	p	2I	85⅛	50¼	37 1/16	36x1¾	45x2½	OP
73	221	4.6	155	24.3	69-2800	H	G	B	4-2⅜	7 21/32	PC	Op	Zen	M	DR	DR	P.Ow	Hr	Spi	Own	Jac	O4IM	206	C	2I	106⅞	60	36	36x1¾	45x2½	O
74	221	4.6	155	24.3	69-2800	H	G	B	4-2⅜	7 11/16	PC	Op	Zen	M	DR	DR	P.Ow	Hr	Spi	Own	Jac	OB4IM	233	Pa	TX	85⅛	50¼	37 1/16	36x1¾	45x2½	½
75	221	4.6	155	24.3	69-2800	H	G	B	4-2⅜	7 21/32	PC	Op	Zen	M	DR	DR	P.Ow	Hr	Spi	Own	Jac	OB4IM	256	C	TX	106⅞	60	36	36x1¾	45x2½	½
76	221	4.6	155	24.3	69-2800	H	G	B	4-2⅜	7 21/32	PC	Op	Zen	M	DR	DR	P.Ow	Hr	Spi	Own	Jac	B4IM	337	a	TX	107	60	34	38x2	50x3	½
77	257	4.5	185	28.3	76-2500	H	G	B	4-2⅜	7 21/32	PC	Ha	Zen	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	337	a	TX	107	60	34	38x2½	50x3	½
78	257	4.5	185	28.3	76-2500	H	G	B	4-2⅜	7 21/32	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	418	a	TX	125	72	34⅛	50x3	50x3	½
79	257	4.5	185	28.3	76-2500	H	G	B	4-2⅜	7 11/16	PC	Ha	Zen	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	337	a	TX	107	60	34	38x2½	50x3	½
80	257	4.5	185	28.3	76-2500	H	G	B	4-2⅜	7 21/32	PC	Ha	Zen	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	415	a	TX	107	60	34	38x2½	50x3	½
81	331	4.7	230	33.7	94-2500	H	G	A	4-2½	8 11/16	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IM	415	a	TX	104	60	34	38x2½	50x3	½
82	331	4 4	230	33.7	94-2500	H	G	A	4-2½	8 11/16	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	379	a	TX	125	70	34 1/16	40x3	50x3	½
83	331	4.7	230	33.7	94-2500	H	G	A	4-2½	8 11/16	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	449	a	TX	125	70	34 1/16	40x3	50x3	½
84	331	4.7	230	33.7	94-2500	H	G	A	4-2½	8 11/16	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	449	a	TX	125	72	34	40x3	50x3	½
85	331	4.7	230	33.7	94-2500	H	G	A	4-2½	8 11/16	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	557	a	TX	125	69¼	34 1/16	40x3	54x3	½
86	331	4.7	230	33.7	94-2500	H	G	A	4-2½	8 11/16	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	557	a	TX	125	72	34	40x3	54x3	½
87	331	4.7	230	33.7	94-2500	H	G	A	4-2½	8 11/16	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	557	a	TX	125	69¼	34 1/16	40x3	54x3	½
88	331	4.7	230	33.7	94-2500	H	G	A	4-2½	8 11/16	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	557	a	TX	125	72	34	40x3	54x3	½
89	331	4.7	230	33.7	94-2500	H	G	A	4-2½	8 11/16	PC	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	557	a	TX	107	72	34⅛	50x3½	54x3	½
90	400	4.6	296	40.9	110-2300	H	G	A	4-2.7	8 11/16	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	449	a	TX	125	69¼	34 1/16	40x3	54x3	½
91	400	4.7	296	40.9	110-2300	H	G	A	4-2.7	8 11/16	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	557	a	TX	125	69¼	34 1/16	40x3	54x3	½
92	400	4.7	296	40.9	110-2300	H	G	A	4-2.7	8 11/16	FP	Ha	Str	M	DR	DR	P.Ow	Lo	Spi	Own	Jac	B4IMV	557	a	TX	125	72	34	50x3	54x3	½
93	400	4.6	296	40.9	110-2300	H	G	A	4-2.7	8 11/16	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	557	a	TX	125	70	34 1/16	40x3	54x3	½
94	400	4.7	296	40.9	110-2300	H	G	A	4-2.7	8 11/16	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	Ws4IA	618	a	TX	125	70	34 1/16	40x3	54x3	½
95	400	4.7	296	40.9	110-2300	H	G	A	4-2.7	8 11/16	FP	Ha	Str	M	DR	DR	P.Ow	Lo	Spi	Own	Jac	Ws4IA	618	a	TX	125	72	34	50x3½	54x3	½
96	450	4.7	340	46.7	120-2300	H	G	A	4-2.7	8 11/16	FP	Ha	Str	M	DR	DR	P.Ow	Lo	Spi	Own	Jac	Ws4IA	618	a	TX	125	72	34	50x3½	54x3	½
97	400	4.7	296	40.9	110-2300	H	G	A	4-2.7	8 11/16	FP	Ha	Str	M	DR	DR	P.Ow	Lo	Spi	Own	Jac	Ws4IA	618	a	TX	107	72	34⅛	50x3½	54x3	½
98	400	4.6	296	40.9	110-2300	H	G	A	4-2/7	8 11/16	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	594	a	TX	210	117	34 1/16	50x3½	54x3	½
99	525	4.5	380	48.6	128-2100	H	C	A	7-2¾	14 11/16	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	594	a	TX	137	82	34 1/16	50x3½	54x3	½
100	525	4.5	380	48.6	128-2100	H	C	A	7-2¾	14 11/16	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IMV	594	a	TX	137	82	34 1/16	50x3½	54x3	N
101	616	4.5	450	57.0	149-2100	H	C	A	7-2¾	14 11/16	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B4IA	638	a	TX	137	82	34 1/16	50x3½	....	½
102	200	4.7	121	24.0	50-2800	L	C	A	3-2⅛	5⅞	FP	No	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 30000H	Ros	L4IH	249	p	FD	81½	51¾	34	36x2¼	45x2½	½
103	214	5.3	142	27.4	71-3200	L	C	A	4-2⅜	6⅜	FP	No	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 30000H	Ros	L4IH	249	p	FD	81½	51¾	34	36x2¼	45x2½	½
104	200	4.7	121	24.0	50-2800	L	C	A	3-2⅛	5⅞	PC	No	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 30000H	Ros	L4IH	249	p	FD	81¾	51½	34	36x2¼	45x2½	½
105	214	5.3	142	27.3	71-3200	L	C	A	4-2⅜	6⅜	PC	No	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 30000H	Ros	L4IH	249	p	FD	81¾	51½	34	36x2¼	45x2½	½
106	299	4.9	198	33.7	85-2800	L	G	C	4-2⅝	9⅛	PC	No	Til	M	AL	AL	P.BL	Pe	Blo	Tim 30000	Ros	L4IH	249	p	FD	81¾	51½	34	36x2¼	45x2½	½
107	224	4.7	146	25.3	61-2900	L	G	C	4-2⅜	8 1/16	PC	Mo	Zen	V	AL	AL	D.Jo	Pe	Blo	Tim 31000H	Ros	L4IH	260	p	FD	94	60⅜	34	40x2¼	50x2½	½
108	299	4.9	198	33.7	85-2800	L	G	C	4-2⅝	9⅛	PC	No	Til	M	AL	AL	P.BL	Pe	Blo	Tim 31000	Ros	L4IH	260	p	FD	94	60⅜	34	40x2¼	50x2½	½
109	227	4.7	142	27.2	55-2400	L	G	C	3-2⅛	5⅞	PC	Mo	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 31000H	Ros	L4IH	269	p	FD	81	51¾	34	36x2¼	45x2½	½
110	248	5.0	136	27.3	70-3000	L	C	C	7-2⅜	10	FP	Mo	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 31000H	Ros	L4IH	260	p	FD	81	51¾	34	36x2¼	45x2½	½
111	278	4.7	182	31.5	85-3300	L	G	A	4-2⅝	9⅛	PC	Mo	Til	M	AL	AL	P.BL	Pe	Blo	Tim 31000H	Ros	L4IH	260	p	FD	120	77¼	34	42x2¼	56x3	½
112	282	5.4	176	33.7	73-2800	L	G	C	7-2½	10 11/16	PC	Mo	Zen	M	AL	AL	P.BL	Pe	Blo	Tim 31000H	Ros	L4IH	260	P	FD	81	51¾	34	36x2¼	45x2½	½
113	299	4.9	198	33.7	85-2800	L	G	C	4-2⅝	9⅛	P	No	Til	M	AL	AL	P.BL	Pe	Blo	Tim 31000	Ros	L4IH	260	p	FD	120	77¼	34	42x2¼	56x3	½
114	380	4.7	238	40.8	88-2400	H	C	C	7-2¾	13 1/16	PC	No	Zen	M	AL	AL	P.BL	Pe	Blo	Tim 31000	Ros	L4IH	260	p	FD	120	77¼	34	42x2¼	56x3	½
115	299	4.9	198	33.7	85-2800	L	G	C	4-2⅝	9⅛	PC	Mo	Til	M	AL	AL	P.BL	Pe	Blo	Tim 33000H	Ros	L4IHV	330	a	FD	120	77¼	34	42x2¼	56x3	½
116	428	4.6	268	45.9	100-2200	H	C	C	7-2¾	13 1/16	PC	No	Zen	M	AL	AL	P.BL	Pe	Blo	Tim 33000	Ros	L4IHV	330	a	FD	120	77¼	34	42x2¼	56x3	½
117	318	4.5	203	36.	80-2700	L	G	C	7-2⅝	12 11/16	CC	Mo	Zen	M	AL	AL	P.BL	Pe	Blo	Tim 33000H	Ros	L4IHV	330	a	FD	120	77¼	34	42x2¼	50x3	½
118	353	4.8	245	36.2	98-2700	L	G	C	4-2¾	10	PC	Mo	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 33000H	Ros	L4IHV	375	a	FD	127	74¼	34	42x2¼	56x3	½
119	448	17.	280	38.0	83-1800	H	G	N	5-3¼	12	P	En	No	M	CI	LN	D.BL	Pe	Blo	Tim 33000	Ros	L4IHV	375	a	FD	127	74¼	34	42x2½	56x3	½
120	380	4.7	238	40.8	88-2400	H	C	C	7-2¾	13 1/16	PC	Mo	Zen	M	AL	AL	D.Jo	Pe	Blo	Tim 33000	Ros	L4IHV	375	a	FD	156	90	41⅛	44x2½	60x3	½
121	428	4.6	268	45.9	100-2200	H	C	C	7-2¾	13 1/16	PC	Mo	Zen	M	AL	AL	D.Jo	Pe	Blo	Tim 33000	Ros	L4IHV	375	a	FD	176 1/16	119 1/16	41⅛	44x2½	60x3	½
122	428	4.6	268	45.9	100-2200	H	C	C	7-2¾	13 1/16	PC	Mo	Zen	M	AL	AL	D.BL	Pe	Blo	Tim 35000	Ros	L4IHV	466	a	FD	98	67	34	42x2½	52x3	½
123	779	4.5	505	66.2	143-1600	L	G	H	7-3½	17	PC	No	Til	M	AL	AL	D.BL	Pe	Blo	Tim 35000	Ros	L4IHV	466	a	FD	98	67	34	42x2½	52x3	½

Line Number	Make and Model	GENERAL (See Keynote): Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight	Chassis Wt. (Stripped)	TIRE SIZE: Front	Rear	MAJOR UNITS: ENGINE: Make and Model	No. of Cylinders Bore and Stroke	TRANSMISSION: Make and Model	Location and Forward Speeds	Aux. Location and Speeds	REAR AXLE: Make and Model	Gear and Type	Drive and Torque	GEAR RATIOS: In High	In Low	FRAME: Side Rail Dimensions	Type
1	Gramm (Con.) GW	5–7½	5175	157	240	28000	9500	B9.00/20	DB9.00/20	Con 21R	6-4⅜x4¾	BL 554	U 4	No	Wis 1627KW	2F	H	6.3	41.0	7½x3x¼	P
2	GWD	5–7½	6495	157	240	30000	10000	B10.50/20	D10.50/20	Cum H Die.	6-4⅞x6	BL 735	U 5	No	Wis 1737KW	2F	H	5.75	21.2	12x3x¼	P
3	HY	5	6595	210	236	22000	10100	B9.00/20	DB9.00/20	Con 16H	6-4¾x5¾	Fu HU16	U 4	No	Wis12527KW	2F	H	4.0	25.2	8¾x3¼x¼	L
4	G.-P. (7) 635	2–3	1445	154	160	15000	3650	B7.00/20	DB7.00/20	Lyc SB	6-3⅜x4½	Fu MKU	U 4	No	Tim 53200H	SF	H	6.3	42.9	9x5/16x3	TL
5	645	2½–3½	2425	154	175	18000	5775	B8.25/20	DB8.25/20	Wa 6-90-255	6-3⅜x4¾	Fu 5A380	U 5	No	Tim 58200H	SF	H	6.5	47.8	10x3½x5/16	TL
6	(7) 665	3½–5	4170	162	179	20000	7600	B9.00/20	DB9.00/20	Wa6-110-358	6-4x4¾	Fu 5A380	U 5	No	Wis 70000L	2F	R	8.0	56.0	12x3½x5/16	TL
7	(7) 675	5–7	5445	162	179	25000	9450	B9.75/20	DB9.75/20	Wa6-125-462	6-4⅜x5¼	Fu 5A530	U 5	No	Wis 1337H	2F	R	8.6	61.0	14x3½x5/16	TL
8	Hendrickson 15S	2½	2600	Op	Op	15000	6000	B8.25/20	DB8.25/20	Wau 6-90	6-3⅜x4¾	Fu 5A38	U 5	No	Tim 54200H	SF	H	Opt	Opt	8x3x5/16	C
9	19S	3	3100	Op	Op	19000	6500	B9.00/20	DB9.00/20	Wau 6-110	6-4x4¾	Fu 5A38	U 5	No	Tim 58200H	SF	H	Opt	Opt	8x3x5/16	C
10	24S	4	3600	Op	Op	24000	8200	B9.75/20	DB9.75/20	Wau 6-110	6-4x4¾	Fu 5A38	U 5	No	Tim 75733H	w/2	R	Opt	Opt	8x3x5/16	P
11	32S	5	4200	Op	Op	32000	10600	B9.75/20	DB9.75/20	Wau 125	6-4⅜x5¼	Fu 5A53	U 5	No	Tim 76733H	w/2	R	Opt	Opt	8x3x5/16	P
12	Hug 19	2	1500	118	118	12600	5800	B7.50/20	DB7.50/20	Wau 6BL	6-3½x4¼	Cla B312	U 4	No	Cla B642	SF	H	7.16	47.0	8x2½x¼	T
13	23	2	1785	146	191	12310	5510	B7.00/20	DB7.00/20	Bud H298	6-3¾x4½	Fu MLU	U 4	No	Cla B611	SF	H	5.66	36.0	8x3x¼	T
14	23S	2½	2175	146	201	15350	5660	B8.25/20	DB8.25/20	Bud H298	6-3¾x4½	Fu MLU	U 4	No	Cla B642	SF	H	6.42	40.8	8x3x¼	T
15	42	3	2175	146	201	15600	6400	B8.25/20	DB8.25/20	Bud H298	6-3¾x4½	Fu MLU	U 4	No	Cla B805	SF	H	6.37	40.5	8x3x¼	T
16	41S	3	5070	158	158	18165	8500	B9.75/20	B12.75/20	Bud K428	6-4⅝x4¾	Fu MRUAY	U 4	A 3	Wis 1237H	2F	H	8.95	119.	8x3x¼	T
17	42K	3	2393	146	201	16500	7300	B9.00/20	DB9.00/20	Bud K369	6-4 1/16x4¾	BL 51-5	U 5	No	Cla B805	SF	H	7.12	42.0	8x3x¼	T
18	70	3	3435	122	122	19500	7535	B9.00/20	DB9.00/20	Bud K369	6-4 1/16x4¾	Fu 5A380	U 5	No	Wis 70000Q	2F	H	9.14	64.0	6x3x¼	I
19	87K	3½	4300	128	128	22400	7600	B9.75/20	DB9.75/20	Bud K428	6-4⅝x4¾	Fu MHOG	A 8	No	Wis 1237Q	2F	H	8.95	79.0	7x3⅝x¼	I
20	43	3½	3380	146	201	22500	7300	B9.75/20	DB9.75/20	Bud K428	6-4⅝x4¾	Fu VUOG	U 5	No	Wis 1237H	2F	H	8.95	62.0	8x3x¼	T
21	87Q	5	4875	144	144	27000	9805	B10.50/20	DB10.50/20	Bud K428	6-4⅝x4¾	Fu MHOG	A 8	No	Wis 1737K	2F	H	9.16	99.0	8x4x11/32	I
22	43L	5	3850	146	201	28105	8905	B9.75/20	DB9.75/20	Bud L525	6-4½x5½	Fu VUOG	U 5	No	Wis 1737KB	2F	H	9.16	64.0	8x3x¼	T
23	97L	5	5815	144	144	35620	10810	B10.50/20	DB10.50/20	Bud L525	6-4½x5½	Fu VU	U 5	A 3	Wis 19027	2F	H	11.1	178.	8x4x¼	I
24	Indiana 85	1½	1025	141	186	10000	3950	B6.50/20	DB6.50/20	Her JXB	6-3⅝x4½	BL 124	U 4	No	Tim 53200H	SF	H	5.66	35.1	7 1/16x2½x3/16	T
25	95	2	1195	141	186	12000	4400	P32x6	DP32x6	Her JXC	6-3¾x4¼	BL 224	U 4	No	Tim 54300H	SF	H	5.85	36.2	7 1/16x2½x3/16	T
26	95DR	2½	1275	141	186	15000	4650	B7.50/20	DB7.50/20	Her JXC	6-3¾x4¼	BL 224	U 4	Op	Wis 4916L	2F	H	6.66	41.2	7 1/16x2½x3/16	T
27	17A	3	2300	156	212	17000	6300	B8.25/20	DB8.25/20	Her WXC	6-4x4½	BL 3341	U 4	A 3	Tim 58205H	SF	H	6.83	43.0	8x3x¼	T
28	17ADR	3	2475	156	212	18000	6350	B8.25/20	DB8.25/20	Her WXC	6-4x4½	BL 3341	U 4	Op	Wis 70000H	2F	R	7.06	44.5	8x3x¼	T
29	17	3	2450	170	224	18000	6600	B8.25/20	DB8.25/20	Her YXC	6-4⅜x4¾	BL 3341	U 4	Op	Tim 58205H	SF	R	6.14	38.7	8½x3x5/16	T
30	17DR	3	2675	170	224	19000	6700	B8.25/20	DB8.25/20	Her YXC	6-4⅜x4¾	BL 334	U 4	Op	Wis 70000	2F	R	6.28	38.6	8⅛x3x5/16	T
31	19DR	3½	3400	170	224	22000	7600	B9.00/20	DB9.00/20	Her YXC	6-4⅜x4¾	BL 524	U 4	Op	Wis 1237H	2F	R	7.2	52.3	8⅛x3x5/16	T
32	43DR	4	4300	170	224	25000	8000	B9.75/20	DB9.75/20	Her RXB	6-4½x5¼	BL 524	U 4	Op	Wis 1627KH	2F	R	6.96	50.7	8⅛x3x5/16	T
33	45DR	5	4800	170	224	25000	8700	B9.75/20	DB9.75/20	Her RXC	6-4⅝x5¼	BL 534	U 4	Op	Wis 1737H	2F	R	7.14	45.4	8¼x3x⅜	T
34	47DR	5–7	7500	188	234	28000	10500	B10.50/20	DB10.50/20	Cum.6HDie.	6-4⅞x6	BL 7351	A 5	No	Wis 1910W	2F	R	7.16	45.0	8¼x3x⅜	T
35	International (8) D1	½	360	113	113	4200	2180	B5.25/18	B5.25/18	Own D	6-3 5/16x4⅛	Own D	U 3	No	Own D-55	S½	H	4.18	12.7	5¼x2¼x5/32	T
36	(A) M2	1	850	118	118	7000	3180	B6.50/20	B6.50/20	Wau XAH	4-3⅝x4½	Own H-4-A	U 4	No	Own 713	SF	H	6.16	39.5	11⅛x2¾x¼	D
37	A2	1½	615	136	160	8000	2945	B6.00/20	B6.00/20	Wau XAH	4-3⅝x4½	Own H-4-A	U 4	No	Own 708	SF	H	6.16	39.5	5⅞x2¾x5/32	T
38	B2	1½	615	136	136	8000	2945	B6.00/20	B6.00/20	Wau XAH	4-3⅝x4½	MM "O"	U 3	No	Own 704	SF	H	6.16	47.3	5⅞x2¾x5/32	T
39	A3	1½	695	136	160	10000	3572	P30x5	P32x6	Lyc SAH	6-3¼x4½	Own H-4-A	U 4	No	Own 710	SF	H	5.28	33.8	7x2¾x3/16	T
40	A3½	1½	970	136	160	10100	3600	B6 50/20	DB6.50/20	Lyc SAH	6-3¼x4½	WG T7	U 4	No	Own 710	SF	H	5.28	33.8	7x2¾x3/16	T
41	AL3	1½	895	138	164	10000	4032	B6.00/20	DB6.00/20	Lyc 4SLH	6-3¼x4½	WG T7	U 4	No	Own 800	S½	H	6.50	42.9	6½x2¼x¼	T
42	B-3	1½	695	136	160	10000	3385	P30x5	P32x6	Own FAB2	6-3 5/16x4	Own H-4-A	U 4	No	Own 720	SF	H	5.29	33.8	7x2¾x3/16	T
43	B4	2	1045	145	185	12750	4055	B6.50/20	DB6.50/20	Own FAB-3	6-3 5/16x4	Own H-4-A	U 4	No	Own 750	SF	H	6.5	41.6	8x3¼x3/16	T
44	A4	2	1625	145	185	15750	5221	P32x6	DP32x6	Own FBB	6-3⅝x4½	OwnH-5	U 5	No	Own 902	SF	H	6.50	47.8	7x3¾x¼	T
45	A5	3	2100	156	210	18750	5895	P34x7	DP34x7	Own FBB	6-3⅝x4½	OwnH-5	U 5	No	Own 1002	SF	H	7.16	64.7	8x3¾x¼	T
46	A6	3	2450	156	210	20850	6120	P34x7	DP34x7	Own FBB	6-3⅝x4½	OwnH-5	U 5	No	Own 1150	2F	H	8.5	76.8	8½x3¾x5/16	T
47	W2	3½	3300	148	200	24000	8450	P36x8	DP36x8	HaS 151	4-4¼x5½	Own H-6	U 5	No	Own 1200	2F	H	6.85	83.9	7x3x¼	T
48	W3	5	4850	160	235	28000	10125	S36x6°	S40x12°	HaS 152	4-4¾x5½	OwnH -7	U 5	No	Own 1300	2F	H	7.85	70.5	8x3x¼	T
49	A7	5–7½	6200	160	225	37000	11590	B9.75/20	DB9.75/20	Own FDB	6-4½x5½	Own H-7	U 5	No	Own 1301	2F	H	6.37	57.2	12⅛x3½x⅜	T
50	A8	7½	6300	160	225	37000	11590	B9.75/20	DB9.75/20	Own FEB	6-5x5½	Own H-7	U 5	No	Own 1301	2F	H	6.37	57.2	12⅛x3½x⅜	T
51	Kenworth 87	1½–2	1245	146	170	11200	3900	B6.50/20	DB6.50/20	Her JXB	6-3⅝x4¼	BL 234	U 4	...	Tim 53200H	SF	H	5.14	33.1	8x3x¼	T
52	88	2	1480	146	200	13400	4400	P32x6	DP32x6	Her JXC	6-3¾x4¼	BL 234	U 4	Op	Tim 54300H	SF	H	5.83	37.4	8x3x¼	T
53	101B	2–2½	2050	146	200	13400	4700	B7.50/20	DB7.50/20	Bud H298	6-3¾x4½	BL 234	U 4	Op	Tim 54300H	SF	H	5.83	37.4	8x3x¼	T
54	89	2½	1670	146	200	15000	4600	B7.50/20	DB7.50/20	Her JXC	6-3¾x4¼	BL 234	U 4	Op	Tim 56200H	SF	H	6.16	39.5	8x3x¼	T
55	127	2½–3	2600	154	202	16300	5490	B8.25/20	DB8.25/20	Her WXC	6-4x4½	BL 334	U 4	Op	Tim 56200H	SF	H	6.16	40.7	8x3x¼	T
56	90	3	1820	146	200	18200	5500	B7.50/20	DB7.50/20	Her JXC	6-3¾x4¼	BL 234	U 4	...	Tim 58205H	SF	H	6.83	43.8	8x3x¼	T
57	146B	3–4	3300	158	206	19500	5960	B9.00/20	DB9.00/20	Bud K393	6-4 1/16x4¾	BL 334	U 4	Op	Tim 58205H	SF	H	6.83	43.4	8x3x¼	T
58	D146B	3–4	***	158	206	19500	7500	B9.00/20	DB9.00/20	Bud D6-415	6-4x5½	BL 5341	U 4	Op	Tim 58206H	FS	H	6.83	43.8	8x3x¼	T
59	166B	3½–4	3850	156	204	20700	6890	B9.00/20	DB9.00/20	Bud K393	6-4 1/16x4¾	BL 334	U 4	Op	Tim 58205H	SF	H	6.83	43.4	7x9x3x¼	T
60	166A	3½–4	4330	156	204	20700	6890	B9.00/20	DB9.00/20	HaS 147	6-4x5	BL 334	U 4	Op	Tim 58205H	SF	H	6.83	43.4	7x9x3x¼	T
61	186	4–5	4675	155	221	25600	7710	B9.75/20	DB9.75/20	Her YXC2	6-4½x4¾	BL 1554	U 4	A 3	Tim 75720H	2F	H	7.33	105.	7x9x3x¼	T
62	241	5–7	5450	169	221	27800	9000	B9.75/20	DB9.75/20	Her RXB	6-4½x5¼	BL 714	U 4	A 3	Tim 76720W	2F	H	7.33	85.5	7x9x3x¼	T
63	241A	5–7	6500	169	228	27800	9500	B9.75/20	DB9.75/20	HaS 160	6-4¼x5½	BL 714	U 4	A 3	Tim 76720W	2F	H	7.33	85.5	8x3x5/16	C
64	241B	5–7	6150	174	228	27800	9500	B9.75/20	DB9.75/20	Bud GL-6	6-4½x6	BL 714	U 4	A 3	Tim 76720W	2F	H	7.33	85.5	8x3x5/16	C
65	241C	5–7	7200	174	228	27800	10000	B9.75/20	DB9.75/20	HaS 175	6-5x6	BL 714	U 4	A 3	Tim 76720W	2F	H	6.38	86.5	8x3x5/16	C
66	Kleiber 80	1½–2½	1300	140	160	11200	3950	B7.00/20	DB7.00/20	Her JXB	6-3⅝x4¼	BL 2241	U 4	No	Tim 53200H	BF	H	5.14	34.0	5⅝x3¼x¼	C
67	100	2–3½	1575	158	170	13400	4400	B7.50/20	DB7.50/20	Her JXB	6-3⅝x4¼	BL 3241	U 4	No	Tim 54200H	BF	H	5.14	34.0	7⅛x3⅜x¼	C
68	120	2½–4½	2100	170	180	16300	5150	B8.25/20	DB8.25/20	Con E601	6-3⅜x4¼	BL 3241	U 4	No	Tim 56200H	BF	R	6.17	33.4	7⅛x3⅜x¼	C
69	140	3–5½	2650	180	190	20700	6500	B8.25/20	DB8.25/20	Con 18R	6-4x4½	BL 3241	U 4	No	Tim 58200H	BF	R	6.84	38.7	7⅛x3⅜x¼	C
70	210	4–6	3800	190	200	22000	7600	B9.00/20	DB9.00/20	Con 21R	6-4⅜x4¾	BL 5241	U 4	No	EatDR2613H	2F	R	7.25	42.0	7⅛x3⅜x¼	C
71	KD4	4	5400	190	200	22000	8000	B9.00/20	DB9.00/20	Cum H Die.	6-4⅞x6	BL 5351	U 4	No	EatDR 2613W	2F	R	5.5	70.	7⅛x3⅜x¼	C
72	KD6	6	6000	206	210	26000	9500	B9.75/20	DB9.75/20	Cum.6HDie	6-4⅞x6	BL 714	A 4	No	Eat 65041W	2F	R	5.5	91.0	7⅛x3⅜x¼	C
73	La Fr. Republic C-2	2	1100	150	162	11000	3800	B6.00/20	DB6.00/20	Lyc SA	6-3¼x4½	WG T9	U 4	No	Tim 53200H	SF	R	5.67	35.9	5⅜x2x¼	C
74	D-2	2–2½	1485	162	175	14000	4600	B6.50/20	DB6.50/20	Lyc SB	6-3⅜x4½	WG T9	U 4	No	Tim 54200H	SF	R	5.83	37.9	7x3x¼	C
75	E-2	2½–3	2005	162	190	17000	5375	P32x6	DP32x6	Lyc ASD	6-3¾x4½	Fu Mlu-Bb	U 4	No	Tim 56200H	SF	R	7.4	47.0	7x3x¼	C
76	F-3	3½–4	2420	174	198	21000	6240	P34x7	DP34x7	Wau MK	6-4⅛x4⅜	Fu MGU14	U 4	No	Tim 58200H	SF	R	7.8	50.6	8x3x¼	C
77	H-5	4–5	3285	179	206	26000	7840	B9.75/20	DP9.75/20	Wau MZ	6-4¼x4¾	Fu MRU	U 4	No	Tim 75733H	2F	R	7.97	53.0	8x3x¼	C
78	M-3	5–6	4640	174	198	32000	8490	B10.50/20	DB10.50/20	Wau 6SRL	6-4⅝x5⅛	Fu VUOG	U 5	No	Tim 76733H	2F	R	8.85	62.5	9½x3½x5/16	C
79	35-4	7–8	6570	174	198	35000	9700	B10.50/24	DB10.50/24	Wau 6-125	6-4⅝x5⅛	Fu MHU	U 4	No	Tim 78720W	2F	R	8.90	58.2	9½x3½x5/16	C
80	Le Moon 150	1½	1150	140	152	....	3300	B6.50/20	B6.50/20	Con 20C	6-3⅜x4⅝	BL 214	U 4	No	Tim 53200H	BF	H	5.14	31.8	6x3x5/16	TF
81	200	1½–2	1350	160	178	....	3600	B7.00/20	DB7.00/20	Con 20C	6-3⅜x4⅝	BL 214	U 4	No	Tim 53200H	BF	H	5.14	31.8	6x3x5/16	TF
82	300	2–3	1575	163	190	....	4200	B7.50/20	DB7.50/20	Con 20C	6-3⅜x4⅝	BL 214	U 4	No	Tim 54200H	BF	H	6.80	42.1	6½x3¾x¼	TF
83	400	3–4	2175	163	190	....	5000	B8.25/20	DB8.25/20	Wau 6MS	6-3¾x4¾	BL 314	U 4	No	Tim 56200H	BF	R	6.16	40.6	6½x3¾x¼	TF
84	505	4–5	2775	160	190	....	6000	B9.00/20	DB9.00/20	Wau 6MK	6-4⅛x4¾	BL 3341	U 4	No	Tim 58205H	BF	R	6.14	40.6	6½x3¾x¼	P
85	501	4–5	3150	160	190	....	6500	B9.00/20	DB9.00/20	Wau 6SRL	6-4⅝x5⅛	BL 5351	U 5	No	Tim 58205H	BF	R	6.14	40.6	7x4x¼	C
86	(9) 600	5–6	3450	169	199	....	7200	B9.75/20	DB9.75/20	Wau 6SRL	6-4⅝x5⅛	BL 5341	U 4	No	Tim 65720H	WF	R	6.00	43.2	9x4x5/16	C
87	Mack BL	1–2	2500	138	192	....	4050	B6.00/20	DB6.00/20	Own BL	6-3¼x5	Own BG	U 4	No	Tim 52050	SF	H	5.20	27.6	7x3x5/16	T
88	BG	1½–3	3000	138	192	....	4800	P32x6	DP32x6	Own BG	6-3⅝x5	Own BG	U 4	No	Own BG	SF	H	5.44	26.8	7x3x5/16	T
89	BF	2½–4	4200	156	216	....	6600	B8.25/20	DB8.25/20	Own BG	6-3⅝x5	Own AB	U 4	No	Own AB	2F	H	7.01	33.9	7 5/16x3x5/16	T
90	AB	3–5	4000	147	219		6450	P34x7	DP34x7	Own AB	4-4¼x5	Own AB	U 4	No	Own AB	CD	R	7.72	37.4	8x2¼x¼	T
91	AB	3–5	4200	147	219		6700	P34x7	DP34x7	Own AB	4-4¼x5	Own AB	U 4	No	Own AB	2F	H	7.54	36.6	8x2¼x¼	T
92	AB	3–5	4150	147	219		6450	P34x7	DP34x7	Own BG	6-3⅝x5	Own AB	U 4	No	Own AB	CD	R	7.72	37.4	8x2¼x¼	T
93	AB	3–5	4500	147	219		6700	P34x7	DP34x7	Own BG	6-3⅝x5	Own AB	U 4	No	Own AB	2F	H	7.58	36.7	8x2¼x¼	T
94	BM	3–5	4700	157	211	....	7500	B9.00/20	DB9.00/20	Own CE	6-4x5½	Own BC	U 4	No	Own AB	2F	H	7.01	40.9	8½x3x¼	T
95	(c.o.e.-15) CH	3–5	5200	150	186	....	9200	B9.00/20	DB9.00/20	Own CE	6-4x5½	Own BX	U 4	No	Own BC	2F	H	7.01	49.4	8½x3x¼	T
96	BC	3½–6	5250	154	226	....	7850	P36x8	DP36x8	Own CE	6-4x5½	Own BC	U 4	No	Own BC	2F	H	7.58	44.2	8½x3x5/16	T
97	BC	3½–6	5500	154	226	....	8000	P36x8	DP36x8	Own CE	6-4x5½	Own BC	U 4	No	Own BC	CD	R	7.88	46.0	8½x3x5/16	T
98	BX	3½–6	5750	171	225	....	7900	B9.75/22	DB9.75/22	Own CF	6-4¼x5½	Own BX	U 4	No	Own BX	CD	R	7.88	55.2	9½x3x¼	T
99	BX	3½–6	5600	171	225	....	8050	B9.75/22	DB9.75/22	Own CF	6-4¼x5½	Own BX	U 4	No	Own BX	2F	H	7.01	49.4	9½x3x¼	T
100	(c.o.e.-15) CJ	3½–6	6100	150	186	....	10650	B9.75/22	DB9.75/22	Own CF	6-4¼x5½	Own BX	U 4	No	Own BX	2F	H	7.54	53.1	9½x3x¼	T
101	BJ	5–8	6450	168	245	....	9800	B10.50/22	DB10.50/22	Own BK	6-4½x5½	Own AL	A 4	No	Own AK	2F	H	6.92	36.4	11¼x3¼x¼	T
102	BQ	6–8	6800	191	245	....	10000	B10.50/22	DB10.50/22	Own BQ	6-4¾x5¾	Own BQ	A 4	No	Own AK	2F	H	7.43	47.7	10½x3x¼	T
103	AK	5–7½	5150	162	228	....	9500	B10.50/24°	DB10.50/24°	Own AC	4-5x6	Own AC	J 4	No	Own AC	CD	R	7.83	50.5	8⅝x3x5/16	C
104	AK	5–7½	5250	162	228		9400	B10.50/24°	DB10.50/24°	Own AC	4-5x6	Own AK	A 4	No	Own AK	2F	H	6.92	55.3	8½x2¾x¼	C
105	AK	6–8	6450	174	240		10400	B10.50/22	DB10.50/22	Own BQ	6-4¾x5¾	Own AC	A 4	No	Own AK	2F	H	7.43	47.7	8⅝x3x5/16	C
106	BX-S	7½	6250	207	225	....	9200	B9.75/24	DB9.75/24	Own BX	6-4¼x5½	Own B	U 4	No	Own BX	2F	H	7.54	53.1	9½x3x¼	T
107	AC Light	5–7½	5150	168	240	....	9200	B10.50/24°	DB10.50/24°	Own AC	4-5x6	Own AC	J 4	No	Own AC	CD	R	8.46	54.4	8x3x5/16	C
108	AC Medium	6–8	5500	168	240	....	9800	S36x6	DS40x6	Own AC	4-5x6	Own AC	J 4	No	Own AC	CD	R	7.75	49.8	8x3x5/16	C
109	AC Heavy	7½–10	6000	168	240	....	10150	S36x7	DS40x7	Own AC	4-5x6	Own AC	J 4	No	Own AC	CD	R	8.95	57.4	8x3x5/16	C
110	AC	6–8	6450	174	240	....	11400	B10.50/24	DB10.50/24	Own BQ	6-4¾x5¾	Own AC	A 4	No	Own AC	CD	R	8.4	53.9	8⅝x3x5/16	C
111	AP	7½–10	8500	191	216	....	11700	S36x7	DS40x8	Own AP	6-5x6	Own AC	J 4	No	Own AC	CD	R	8.31	53.3	8x3x5/16	C
112	Menominee A-15	1½	1485	144	160	8750	3750	B7.00/20	B7.00/20	Wau TL	6-3⅜x4¾	Fu MKU10	U 4	No	Cla B373	SF	R	5.00	31.7	5⅝x3¼x¼	C
113	DX-6	2½	2850	156	175	13760	5760	B7.50/20	B7.50/20	Wau 6-90	6-3⅜x4¾	BL 234	U 4	No	Wis 6617	2F	R	5.83	37.3	6x2¼x5/16	C
114	DN-6	3	3275	156	175	15200	6200	B8.25/20	DB8.25 20	Wau MK	6-4⅛x4¾	BL 524	U 4	No	Wis 8817	2F	R	6.72	48.9	6x2¼x5/16	P
115	A30	3	3275	165	185	15035	7035	B8.25/20	DB8.25/20	Wau MK	6-4⅛x4¾	BL 528	U 8	No	Tim 58206H	SF	R	7.8	90.8	8x3x¼	C
116	N-6	3½	3715	165	185	16800	6800	B8.25/20	DB8.25/20	Wau 6-110	6-4x4¾	BL 524	U 4	No	Wis 8817	2F	R	7.93	57.7	8x2⅝x¼	P
117	JX-6	5	4650	175	190	20200	7200	B9.00/20	DB9.00/20	Wau 6-125	6-4⅝x5⅛	BL 724	U 4	No	Wis 1458	2F	R	9.12	64.4	10x2⅝x¼	P
118	6W-8	8	5800	185	200	28600	11000	B8.25/20	DB8.25/20	Wau 6-125	6-4⅝x5⅛	BL 724	U 4	No	Wis 8D210	2F	R	8.50	60.1	10x2⅝x¼	P
119	Moreland RR10	1½	1195	159	Op	10000	4195	B6.50/20	DB6.50/20	Her JXC	6-3¾x4¼	BL 224	U 4	No	Tim 53200H	SF	H	5.66	35.0	7 5/16x2⅝x¼	T
120	RR12	2	1400	159	Op	12000	4585	P32x6	DP32x6	Her JXC	6-3¾x4¼	BL 224	U 4	No	Tim 54300H	SF	H	5.83	36.1	7 5/16x2⅝x¼	T
121	RR15	3	1600	159	Op	15000	5250	B8.25/20	DB8.25/20	Her JXC	6-3¾x4¼	BL 224	U 4	No	Tim 56200H	SF	H	6.17	38.2	7 5/16x2⅝x¼	T
122	B16	4	2595	184	Op	16000	5800	B8.25/20	DB8.25/20	Her WXC3	6-4¼x4½	BL 334	U 4	No	Tim 56200H	SF	R	6.17	38.0	9 5/16x3½x5/16	T
123	(Cont.) E18	5	2828	184	Op	18000	6460	B9.00/20	DB9.00/20	Her WXC3	6-4¼x4½	BL 334	U 4	No	Tim 58205H	SF	R	6.14	37.8	9 5/16x3½x5/16	T

Line Number	Engine Details: Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	Main Bearings: Number and Diameter	Main Bearings: Length	Oiling System Type	Governor Make	Fuel Syst.: Carburetors Make	Fuel Syst.: Fuel Feed	Electrical: Ignition System Make	Electrical: Generator, Starter Make	Clutch Type and Make	Radiator Make	Universals Make	Front Axle: Make and Model	Steering Gear Make	Brakes: Service: Make, Location, Type, Operation	Brakes: Service: Lining Area	Brakes: Service: Drum Material	Brakes: Hand Location, Type	Body Mounting Data: Cab to Rear of Frame	Body Mounting Data: Cab to Rear Axle	Body Mounting Data: Width of Frame	Springs: Front	Springs: Rear	Springs: Auxiliary Type
1	428	4.1	268	45.9	100-2200	H	C	C	7-2 3/4	13 7/16	PC	Mo	Zen	M	AL	AL	D.BL	Pe	Blo	Tim 27450	Ros	Ws4IA	576	a	FD	128 1/2	73 7/8	36	46x3	58x3 1/2	1/2
2	672	17.	440	57.0	125-1800	H	G	N	7-3 1/4	16 1/2	P	En	No	M	CI	LN	D.BL	Pe	Blo	Tim 27450	Ros	Ws4IA	576	a	FD	128 1/2	73 7/8	36	46x3	58x3 1/2	1/2
3	611	4.1	382	54.1	127-2300	L	G	A	7-3	13 11/16	PC	Pe	Zen	M	AL	AL	D.Fu	Pe	Blo	Tim 27450	Ros	Ws4IA	576	a	FD	198 1/2	141 1/2	41 1/2	44x3	60x4	1/2
4	255	4.7	160	27.3	65-2800	L	G	C	4-2 3/8	8 7/16	PC	No	Zen	M	MY	AL	P.BB	Ow	Spi	Tim 30000H	Ros	L4IH	268	a	TD	Opt	71	31	40x2 1/2	54x3	1/2
5	255	5.4	182	27.3	90-3200	F	G	C	4-2 3/8	7 7/16	PC	Wa	Zen	M	MY	LN	P.BB	Ow	Spi	Tim 31000H	Ros	L4IH	342	a	TD	Opt	72	31	40x2 1/2	54x3	1/2
6	358	5.2	254	38.4	110-2800	F	G	C	7-2 7/8	10 3/4	PC	Wa	Zen	M	MY	LN	P.BB	Ow	Spi	Tim 35000H	Ros	L4IH	394	a	TD	Opt	74 1/2	34	40x3	58x3 1/2	1/2
7	462	5.1	324	45.4	125-2600	F	G	C	7-3	13 7/8	PC	Wa	Zen	M	MY	LN	P.BB	Ow	Spi	Tim 35000H	Ros	L4IH	574	a	TD	Opt	86	34	40x3	58x3 1/2	1/2
8	255	4.6	182	27.3	90-3200	F	G	C	4-2 3/8	6 11/16	PC	Wa	Zen	M	DR	DR	D.Fu	Ch	Spi	Tim 31000H	Ros	L4IHV	306	p	TD	Opt	Opt	34	40 1/2x3 1/2	50 1/2x3	N
9	358	4.6	254	38.4	110-2800	F	G	C	7-2 7/8	12 1/2	PC	Wa	Zen	M	DR	DR	D.Fu	Ch	Spi	Tim 35000H	Ros	L4IHV	500	a	TD	Opt	Opt	34	40 1/2x3 1/2	50 1/2x3	N
10	358	4.6	254	38.4	110-2800	F	G	C	7-2 7/8	12 1/4	PC	Wa	Zen	M	DR	DR	D.Fu	Ch	Spi	Tim 35000H	Ros	L4IHV	717	a	TD	Opt	Opt	34	43x3 1/2	53x3 1/2	N
11	462	4.6	324	45.9	125-2600	F	G	C	7-3	13 7/8	PC	Wa	Zen	M	DR	DR	D.Fu	Ch	Spi	Tim 27450	Ros	L4IHV	717	a	TD	Opt	Opt	34	43x3 1/2	66x4	N
12	245	...	162	29.4	72-2800	L	G	A	7-2 3/8	10 1/4	PC	No	Zen	M	DR	DR	P.BB	Ch	Spi	Cla F212	Ros	L4IH	282	c	TX	79	51	31 1/2	35x2 1/2	48x3	1/2
13	298	5.3	200	33.7	80-2800	L	C	C	7-3	9 7/8	PC	Pe	Zen	M	AL	DR	P.BB	Yo	Blo	Cla F318	Ros	L4IH	318	p	CD	81	61	31 1/2	41x2 1/2	54 7/8x3	1/2
14	298	5.3	200	33.7	80-2800	L	C	C	7-3	9 7/8	PC	Pe	Zen	M	AL	DR	P.BB	Yo	Blo	Cla F318	Ros	L4IH	318	p	CD	81	61	31 1/2	41x2 1/2	54 7/8x3	1/2
15	298	5.3	200	33.7	80-2800	L	C	C	7-3	9 7/8	PC	Pe	Zen	M	AL	DR	P.BB	Yo	Blo	Cla F318	Ros	L4IH	380	p	CD	81	61	31 1/2	41x2 1/2	54 7/8x3	1/2
16	428	4.8	280	45.9	107-2600	L	G	B	7-3	11 1/2	PC	Pe	Zen	M	AL	DR	D.Fu	Yo	Blo	Shu 632-5	Ros	L4IH	620	pG	CD	115	72 1/2	31 1/2	41 7/8x2 1/2	54 7/8x3	1/2
17	369	4.8	234	39.6	99-2800	L	G	B	7-3	11 1/2	PC	Pe	Zen	M	AL	DR	BL 61	Yo	Blo	Cla F318	Ros	L4IH	380	p	CD	81	61	31 1/2	41x2 1/2	54 7/8x3	1/2
18	369	4.8	234	39.6	99-2800	L	G	B	7-3	11 1/2	PC	Pe	Zen	M	DR	DR	D.Fu	Yo	Blo	Shu 610-103	Ros	W2IM	326	G	TD	88 3/4	65	34 1/2	41 7/8x2 1/2	48 1/2x3	1/2
19	428	4.8	280	45.9	107-2600	L	G	B	7-3	11 1/2	PC	Pe	Zen	M	DR	DR	D.Fu	Yo	Blo	Shu 610-103	Ros	W2IM	405	G	TD	94 1/2	70 3/4	34 7/16	41 7/8x2 1/2	48 1/2x3	1/2
20	428	4.8	280	45.9	107-2600	L	G	B	7-3	11 1/2	PC	Pe	Zen	M	AL	DR	D Fu	Yo	Blo	Shu 632-3	Ros	L4IH	620	pG	CD	96 1/2	70 3/4	31 1/2	41 7/8x2 1/2	54 7/8x3	1/2
21	428	4.8	280	45.9	107-2600	L	G	B	7-3	11 1/2	PC	Pe	Zen	M	DR	DR	D.Fu	Yo	Blo	Shu 610-103	Ros	W2IM	360	G	TD	110 1/4	86 1/2	35	41 7/8x2 1/2	48 1/2x3	1/2
22	525	4.8	336	48.6	111-2200	L	G	B	7-3	11 1/2	PC	Pe	Zen	M	AL	DR	D.Fu	Yo	Blo	Shu 633-11	Ros	L4IH	556	pG	CD	96 1/2	64	31 1/2	41 7/8x2 1/2	54 7/8x3	1/2
23	525	4.8	336	48.6	111-2200	L	G	B	7-3	11 1/2	PC	Pe	Zen	M	DR	DR	D.Fu	Yo	Blo	Shu 610-103	Ros	W2IM	360	G	TD	119	86 1/2	35	41 7/8x2 1/2	48 1/2x3	1/2
24	228	4.7	142	27.3	59-2800	L	G	C	7-2 1/2	10 11/16	PC	Op	Str	M	AL	AL	P.BL	Yo	Spi	Tim 30020H	Ros	L4IH	249	G	TX	92	56	34	37x2 1/4	54x2 1/2	N
25	282	5.3	176	33.7	73-2800	L	G	A	7-2 1/2	10 11/16	PC	Op	Str	M	AL	AL	P.BL	Yo	Spi	Tim 31020	Ros	L4IH	356	G	TX	92	56	34	37x2 1/4	54x2 1/2	N
26	282	5.3	176	33.7	73-2800	L	G	A	7-2 1/2	10 11/16	PC	Op	Str	M	AL	AL	P.BL	Yo	Spi	Tim 31020	Ros	L4IH	356	G	TX	92	56	34	37x2 1/4	54x2 1/2	1/2
27	339	4.7	210	38.4	76-2400	L	G	A	7-2 5/8	13 1/4	PC	Opt	Str	M	AL	AL	P.BL	Yo	Spi	Shu 5572	Ros	L4IH	380	G	TX	108	69 5/8	34	39 1/2x2 1/2	54x3	1/2
28	339	4.7	210	38.4	76-2400	L	G	A	7-2 5/8	13 1/4	PC	Opt	Str	M	AL	AL	P.BL	Yo	Spi	Shu 5572	Ros	L4IHV	380	G	CD	108	69 5/8	34	39 1/2x2 1/2	54x3	1/2
29	428	4.4	283	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 15582B	Ros	L4IHV	398	G	CD	142	83	34 1/2	40x2 1/2	54x3	1/2
30	428	4.4	283	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 15582	Ros	L4IHV	398	G	CD	142	83	34 1/2	40x2 1/2	54x3	1/2
31	428	4.4	283	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 15582	Ros	L4IHV	398	G	CD	142	83	34 1/2	40x2 1/2	54x3	1/2
32	501	4.9	330	48.6	110-2200	L	G	A	7-3	12 1/2	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 15592B	Ros	L4IHV	546	G	CD	142	83	34 1/2	40x2 1/2	54x3	1/2
33	529	4.9	350	51.3	115-2200	L	G	A	7-3	12 1/2	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 15592B	Ros	L4IHV	546	G	CD	142	83	34 1/4	40x2 1/2	54x3	1/2
34	762	17.	420	57.0	125-1800	H	G	N	7-3 1/2	17 1/2	CC	FN	No	M	CI	LN	dp.BL	Yo	Spi	Shu 1633W	Ros	Ws4IA	560	G	CD	144	90	34	40x3	54x3	1/2
35	213	5.0	133	26.3	66-3400	L	C	C	4-2 5/8	6 1/4	FP	No	Til	M	AL	AL	B-W	Mo	Spi	Own D-50	Own	B4IM	156	P	21	54 7/16	29 1/4	Var	36 1/2x1 3/4	51x1 3/4	N
36	186	4.6	124	21.	39-2400	L	G	C	3-2	6 1/4	FP	No	Zen	V	DR	DR	P.MM	Mo	MM	Own 104	Ros	B4IM	217	Pa	TX	66 7/16	35 11/16	32 1/2	40x2	46x2 1/2	1/4
37	186	4.6	124	21.	39-2400	L	G	C	3-2	6 1/4	FP	No	Zen	V	DR	DR	P.MM	Mo	MM	Own 101	Ros	B4IM	212	P	21	93 5/8	53 5/8	32 1/2	40x2	46x2 1/2	N
38	186	4.6	124	21.	39-2400	L	G	C	3-2	6 1/4	FP	No	Zen	V	DR	DR	P.MM	Mo	MM	Own 101	Ros	B4IM	212	P	21	93 5/8	53 5/8	32 1/2	40x2	46x2 1/2	N
39	224	4.7	138	25.3	54-2700	L	G	A	4-2 3/8	7 1/2	PC	No	Zen	M	DR	DR	P.Ro	Mo	MM	Own 105	Ros	B4IM	287	P	2I	93 5/8	53 5/8	32 7/16	40x2	46x2 1/2	1/2
40	224	4.7	138	25.3	54-2700	L	G	A	4-2 3/8	7 1/2	PC	No	Zen	M	DR	DR	P.Ro	Mo	MM	Own 200	Ros	B4IM	302	P	2I	93 5/8	53 5/8	32 7/16	40x2 1/4	46x2 1/2	1/2
41	224	4.7	138	25.3	54-2700	L	G	A	4-2 3/8	7 1/2	PC	No	Zen	V	DR	DR	P.Ow	Mo	MM	Own 200	Ros	B4IM	295	Pa	2I	98 1/8	55 5/8	32	40x2 1/4	52x2 1/2	1/4
42	207	5.5	137	26.3	59-2900	H	G	C	4-2 3/8	6	FP	Ha	Til	M	DR	DR	P.Ro	Mo	MM	Own 108	Ros	B4IM	271	Pa	2I	93 5/8	53 5/8	32 7/16	40x2	46x2 1/2	1/2
43	223	5.4	154	28.3	63-3200	H	G	C	4-2 3/8	6 7/16	FP	Ha	Til	M	DR	DR	P.Ow	Mo	MM	Own 108	Ros	B4IM	303	Pa	2I	106 5/8	62 5/8	34	40x2	54x3	1/2
44	279	4.6	176	31.5	67-2600	H	G	C	7-2 1/2	13 7/16	FP	Ha	Zen	M	DR	DR	P.Ow	Mo	MM	Own 251	Ros	B4IM	378	Pa	2I	104	61 1/2	34	42x3	54x3	1/2
45	279	4.6	176	31.5	67-2600	H	G	C	7-2 1/2	13 7/16	FP	Ha	Zen	M	DR	DR	P.Ow	Mo	MM	Own 300	Ros	B4IM	430	Pa	2I	115	72 1/2	34	42x3	56x3	1/2
46	279	4.6	176	31.5	67-2600	H	G	C	7-2 1/2	13 1/2	FP	Ha	Zen	M	DR	DR	P.Ow	Mo	MM	Own 300	Ros	B4IM	430	Pa	2I	115	72 1/2	34	42x3	56x3	1/2
47	312	4.0	200	28.9	59-1800	H	C	A	3-2 3/8	7 3/8	FP	HS	Zen	V	RB	DR	P.Ow	Ow	Own	Own 400	Own	BO4IM	710	Pa	2I	106 1/2	73 1/4	34	41 1/2x3	56x3 1/2	1/4
48	390	3.8	240	36.1	69-1800	H	C	A	3-3	7 3/8	FP	HS	Zen	V	RB	DR	P.Ow	Ow	Own	Own 500	Own	BO4IM	794	Pa	2I	120	81 7/8	34	44x3	58x4	1/4
49	525	4.5	315	48.6	98-1800	H	G	C	7-3 1/4	17 3/4	FP	Ha	Zen	M	DR	DR	P.Ro	Mo	MM	Own 503	Ros	BO4IMV	729	Pa	TD	106	72	34	48x3	56x3	N
50	648	4.4	398	60.0	114-1800	H	G	C	7-3 1/4	17 3/4	FP	Ha	Zen	M	DR	DR	P.Ro	Mo	MM	Own 503	Ros	BO4IMV	729	Pa	TD	106	72	34	48x3	56x3	N
51	263	4.7	163	31.5	68-2700	L	G	A	7-2 1/2	10 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 30000H	Ros	L4IH	249	a	TX	108	60	31 1/2	38x2 1/4	52x2 1/2	N
52	282	4.7	176	33.7	73-2700	L	G	A	7-2 1/2	10 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L4IH	335	a	TX	108	60	31 1/2	38x2 1/4	52x2 1/2	N
53	298	4.7	200	33.7	80-2800	L	G	C	7-3	9 1/2	CC	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L4IH	335	a	FD	108	60	31 1/2	39x2 1/2	52x3	1/2
54	282	4.7	176	33.7	73-2700	L	G	A	7-2 1/2	10 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L4IH	335	a	TX	108	60	31 1/2	38x2 1/4	52x2 1/2	1/2
55	339	4.4	212	38.4	76-2400	L	C	A	7-2 5/8	13 1/4	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	335	a	FD	110	72	31 1/2	40x2 1/2	52x3	1/2
56	282	4.7	176	33.7	73-2700	L	G	A	7-2 1/2	10 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L4IH	394	a	TX	108	60	31 1/2	38x2 1/4	52x3	1/2
57	393	4.9	260	42.1	103-2600	L	G	C	7-3	11 1/2	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IHV	394	a	FD	120	72	31 1/2	40x2 1/2	52x3	1/2
58	415	...	264	38.4	93-2000	H	G	Al	7-3	11 1/2	FP	Bu	No	B	No	LN	P.BL	Pe	Spi	Tim 33000H	Ros	L4IH	335	a	FD	120	72	31 1/2	38x2 1/2	52x3	1/2
59	393	4.9	260	42.1	103-2600	L	G	C	7-3	11 1/2	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35100H	Ros	L4IHV	455	a	FD	120	72	33 3/4	42x2 1/2	56x3 1/2	1/2
60	377	4.9	258	38.4	92-2300	H	C	A	4-2 7/8	11 1/8	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35100H	Ros	L4IHV	455	a	FD	120	72	33 3/4	42x2 1/2	56x3 1/2	1/2
61	453	4.8	300	48.6	98-2200	L	G	A	7-3	14	CC	Ha	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35100H	Ros	L4IHV	602	a	FD	110	72	33 3/4	42x2 1/2	56x3 1/2	1/2
62	501	4.9	330	48.6	110-2200	L	G	A	7-3	12 1/2	CC	Ha	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws2ImV	407	a	FD	132	84	33 3/4	42x3	56x4	1/2
63	468	4.4	322	43.3	125-2400	H	C	A	4-2 3/4	10 3/8	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws2ImV	407	a	FD	132	84	33 3/4	42x3	56x4	1/2
64	572	4.3	358	48.6	114-1900	L	G	C	4-3	10 7/16	CC	Bu	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws2ImV	407	a	FD	132	84	33 3/4	42x3	56x4	1/2
65	707	4.4	506	60.0	170-2000	H	C	A	7-3 1/4	11 7/16	FP	HS	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws2ImV	407	a	FD	132	84	33 3/4	42x3	56x4	1/2
66	263	5.4	164	31.5	68-2800	L	G	C	7-2 1/2	10 11/16	PC	No	Str	M	DR	DR	P.BL	Ow	Spi	Tim 30000H	Ros	L4IH	308	G	TD	132	74	34	38x2 1/4	52x2 1/2	1/2
67	263	5.4	164	31.5	70-3000	L	G	C	7-2 1/2	10 11/16	PC	No	Str	M	DR	DR	P.BL	Ow	Spi	Tim 31000H	Ros	L4IH	354	G	TD	144	82	34	38x2 1/2	52x2 1/2	1/2
68	318	4.6	204	36.0	80-2700	L	G	C	7-2 5/8	12 11/16	PC	No	Str	M	DR	DR	D.BL	Ow	Spi	Tim 31000H	Ros	L4IHV	452	G	TD	156	96	34	38x2 1/2	52x3	1/2
69	339	4.2	212	38.4	90-2700	H	C	C	7-2 3/4	13 7/16	FP	No	Str	M	DR	DR	D.BL	Ow	Spi	Tim 33020H	Ros	L4IHV	648	G	TD	168	104	34	38x2 1/2	52x3	1/4
70	427	4.2	270	45.9	118-2500	H	C	C	7-2 3/4	13 7/16	FP	No	Str	M	DR	DR	D.BL	Ow	Spi	Tim 35020H	Ros	L4IHV	676	G	FD	170	108	34	44x2 1/2	52x3	1/4
71	448	17.	280	38.0	83-1800	H	C	N	5-3 1/4	12	P	En	No	M	LN	LN	D.BL	Ow	Spi	Tim 35120W	Ros	Ws4IA	676	G	FD	170	108	34	44x2 1/2	52x3	1/2
72	672	17.	420	57.0	125-1800	H	G	N	7-3 1/4	16 1/2	P	En	No	M	LN	LN	D.BL	Ow	Spi	Tim 26450W	Ros	Ws4IA	848	G	FD	180	130	38	44x2 1/2	52x3	1/2
73	224	4.7	145	25.3	61-2800	L	G	C	4-2 3/8	8 7/16	PC	No	Zen	M	AL	AL	P.BB	Pe	Spi	Tim 30000H	Ros	L4IH	287	Da	TX	110 3/4	67 1/2	31 7/8	38x2	52 1/2x2 1/2	1/2
74	242	5.0	160	27.3	65-2800	L	G	C	4-2 3/4	8 7/16	PC	No	Zen	M	AL	AL	P.BB	Pe	Spi	Tim 31000H	Ros	L4IH	271	Da	TX	143 3/4	79 1/2	32	38x2	52 1/2x2 1/2	1/2
75	299	4.9	195	33.5	82-2600	L	G	C	4-2 3/4	10	PC	Ha	Zen	M	AL	AL	P.BB	Pe	Spi	Tim 31000H	Ros	L4IHV	327	Da	TX	120	78 3/4	32	38x2	57 1/2x2	1/2
76	381	4.4	240	40.8	85-2500	L	G	C	7-2 5/8	12 1/2	CC	Ha	Zen	M	AL	AL	D.Fu	Pe	Spi	Tim 33000H	Ros	L4IHV	367	Da	FD	140 1/4	93	32	39x2 1/2	60x3	1/2
77	354	4.3	228	36 2	86-2300	L	G	C	7-2 5/8	12 1/2	CC	Ha	Zen	M	AL	AL	D.Fu	Pe	Spi	Tim 33000H	Ros	L4IHV	458	Da	FD	144	75	32	39x2 1/2	60x3	1/2
78	462	4.6	310	46.	97-2000	L	G	C	7-3	13 7/8	PC	Wa	Zen	M	AL	AL	D.Fu	Pe	Spi	Tim 35000H	Ros	L4IHV	468	Da	FD	168	88	32 1/2	44x3	60x3 1/2	1/2
79	462	4.6	324	46.	125-2400	L	G	C	7-3	13 7/8	PC	Wa	Zen	M	AL	AL	D.Fu	Ow	Spi	Tim 27450W	Ros	Ws4IA	690	Da	FD	168	81 1/4	34	44x3	60x3 1/2	N
80	248	4.4	150	27.3	65-2800	L	C	A	7-2 3/8	10 7/16	PC	No	Str	M	DR	DR	D.BL	Ch	Spi	Tim 30000H	Ros	L4IH	275	c	TX	96	58	34	37 1/2x2 1/4	49 1/4x2 1/2	N
81	248	4.4	150	27.3	65-2800	L	C	A	7-2 3/8	10 7/16	PC	No	Str	M	DR	DR	D.BL	Ch	Spi	Tim 30000H	Ros	L4IH	275	c	TX	128	81	34	37 1/2x2 1/4	50x2 1/2	1/2
82	248	4.4	150	27.3	65-2800	L	G	A	7-2 3/8	10 7/16	PC	No	Str	M	DR	DR	D.BL	Ch	Spi	Tim 31000H	Ros	L4IH	293	c	TX	128	81	34	37 1/2x2 1/4	50x2 1/2	1/2
83	315	4.6	200	33.7	72-2500	L	G	C	7-2 5/8	12 5/8	PC	No	Str	M	DR	DR	D.BL	Ch	Spi	Tim 33000H	Ros	L4IH	345	c	TX	128	81	34	37 1/2x2 1/4	50 1/2x2 1/2	1/2
84	381	4.4	242	40.8	85-2500	L	G	C	7-2 5/8	12 1/2	PC	No	Str	M	DR	DR	D.BL	Ch	Spi	Tim 33000H	Ros	L4IHV	385	c	CD	128	81	34	39x2 1/2	53x3	1/2
85	462	4.5	300	45.9	98-2000	L	G	A	7-3	13 7/8	PC	Wa	Str	M	DR	DR	D.Fu	Ch	Spi	Tim 35000H	Ros	L4IHV	385	c	CD	128	81	34	39x2 1/2	53x3	1/2
86	462	4.5	300	45.9	98-2000	L	G	A	7-3	13 7/8	PC	Wa	Str	M	DR	DR	D.Fu	Ch	Spi	Tim 35000H	Ros	L4IHV	485	c	RI	128	81	34	39x2 1/2	53x3	1/2
87	248	5.6	153	25.4	72-3000	L	G	C	7-2 5/8	10 11/16	FP	Ha	Str	M	RB	NE	P.Ow	Ow	Spi	Own BL	Own	L4IH	302	P	FX	120	72 1/2	33 7/16	40 1/2x2 1/2	52 3/4x2 1/2	N
88	309	5.4	202	31.5	90-3000	L	G	C	7-2 5/8	10 11/16	FP	Ha	Str	M	RB	NE	P.Ow	Ow	Spi	Own BG	Own	O4IMV	427	a	FX	120	72 1/2	33 7/16	42x2 1/2	54x3	N
89	309	5.4	202	31.5	90-3000	L	G	C	7-2 5/8	10 11/16	FP	Ha	Str	M	RB	NE	P.Ow	Ow	Spi	Own BF	Own	O4IMV	427	a	FX	132	84 1/2	33 7/16	44x2 1/2	54x3	1/2
90	283	4.8	192	28.9	65-2100	L	G	C	3-3	8	PS	Ow	Str	G	RB	NE	D.Ow	Ow	Spi	Own AB	Own	O4IMV	471	a	FX	120	73	33 1/4	42 1/4x3	48x3	N
91	283	4.8	192	28.9	65-2100	L	G	C	3-3	8	PS	Ow	Str	G	RB	NE	D.Ow	Ow	Spi	Own AB	Own	O4IMV	471	a	FX	120	73	33 1/4	42 1/4x3	56 1/2x3 1/2	N
92	309	5.4	202	31.5	90-3000	L	G	C	7-2 5/8	10 11/16	FP	Ha	Str	M	RB	NE	P.Ow	Ow	Spi	Own AB	Own	O4IMV	471	a	FX	120	73	33 1/4	42 1/4x3	48x3	N
93	309	5.4	202	31.5	90-3000	L	G	C	7-2 5/8	10 11/16	FP	Ha	Str	M	RB	NE	P.Ow	Ow	Spi	Own AB	Own	O4IMV	471	a	FX	120	73	33 1/4	42 1/4x3	56 1/2x3 1/2	N
94	414	5.2	270	38.4	108-2400	L	G	C	7-3	12 7/16	FP	Pe	Str	M	RB	NE	P.Ow	Ow	Spi	Own BM	Own	O4IMV	427	a	FX	120	102 1/2	33 1/4	44x2 1/2	54x3 1/2	N
95	414	5.2	270	38.4	108-2400	L	G	C	7-3	12 7/16	FP	Pe	Str	M	RB	NE	P.Ow	Ow	Spi	Own CH	Own	O4IMV	540	a	FX	180	120	33 1/4	50x3	50 1/2x3 1/2	1/2
96	414	5.2	270	38.4	108-2400	L	G	C	7-3	12 7/16	FP	Pe	Str	M	RB	NE	P.Ow	Ow	Spi	Own BC	Own	O4IMV	610	a	FX	120	73	33 1/4	43 3/4x3	56 1/2x3 1/2	N
97	414	5.2	270	38.4	108-2400	L	G	C	7-3	12 7/16	FP	Pe	Str	M	RB	NE	P.Ow	Ow	Spi	Own BC	Own	O4IMV	590	a	JX	120	73	33 3/4	43 3/4x3	54x3	N
98	468	5.2	310	43.4	117-2400	L	G	C	7-3	12 7/16	FP	Pe	Str	M	RB	NE	P.Ow	Ow	Spi	Own BX	Own	O4IMV	619	a	JX	180	120	33 7/16	53 7/16x3	54x3	N
99	468	5.2	310	43.4	117-2400	L	G	C	7-3	12 7/16	FP	Pe	Str	M	RB	NE	P.Ow	Ow	Spi	Own BX	Own	O4IMV	619	a	FX	180	120	33 7/16	53 7/16x3	56 1/2x3 1/2	N
100	468	5.2	310	43.4	117-2400	L	G	C	7-3	12 7/16	FP	Pe	Str	M	RB	NE	P.Ow	Ow	Spi	Own CJ	Own	O4IMV	619	a	FX	180	120	33 1/4	53 1/2x3 1/2	56 1/2x3 1/2	1/2
101	525	4.8	350	48.6	125-2300	L	G	C	4-3 1/2	10 7/16	FP	Ow	Str	M	RB	NE	P.Ow	Ow	Cle	Own AK	Own	O4IMV	618	a	FX	120	79	33 1/4	50x3 1/2	59 7/16x4	1/4
102	611	5.7	398	54.2	128-2300	L	G	C	4-3 1/2	10 7/16	FP	Ow	Str	M	RB	NE	P.Ow	Ow	Cle	Own BQ	Own	O4IMV	618	a	FX	150	102	33 1/4	50x3 1/2	58 7/16x3 1/2	1/2
103	471	4.0	320	40.0	75-1800	L	G	C	3-3	10 11/16	PS	Ow	Str	G	RB	ns	P.Ow	Ow	Spi	Own AK	Own	O4IMV	561	a	JX	132	93	37 1/2	48x3 1/2	52x4	1/2
104	471	4.0	320	40.0	75-1800	L	G	C	3-3	10 11/16	PS	Ow	Str	G	RB	ns	P.Ow	Ow	Spi	Own AK	Own	O4IMV	561	a	FX	132	93	37 1/2	48x3 1/2	56x4	1/2
105	611	5.7	398	54.2	128-2300	L	G	C	4-3 1/2	10 7/16	FP	Ow	Str	M	RB	NE	P.Ow	Ow	Spi	Own AK	Ros	O4IMV	561	a	FX	132	93	37 5/8	47 7/16x3 1/2	58 1/2x4	1/4
106	468	5.2	310	43.4	117-2400	L	G	C	7-3	13 7/16	FP	Ha	Str	M	RB	NE	P.Ow	Ow	Spi	Own BC	Ros	O4IMV	619	a	FX	212	138	33 7/16	53 7/16x3	56 1/2x3 1/2	N
107	471	4.0	320	40.0	75-1800	L	G	C	3-3	10 11/16	PS	Ow	Str	G	RB	ns	P.Ow	Ow	Spi	Own AC	Own	O4IMV	561	c	JX	156	104	37 1/2	46x3 1/2	52x4	1/2
108	471	4.0	320	40.0	75-1800	L	G	C	3-3	10 11/16	PS	Ow	Str	G	RB	ns	P.Ow	Ow	Spi	Own AC	Own	O4IMV	561	c	JX	156	104	37 1/2	46x3 1/2	52x4	1/2
109	471	4.0	320	40.0	75-1800	L	G	C	3-3	10 11/16	PS	Ow	Str	G	RB	ns	P.Ow	Ow	Spi	Own AC	Own	O4IMV	561	c	JX	156	104	37 1/2	46x3 1/2	52x4	1/2
110	611	5.7	398	54.2	128-2300	L	G	C	4-3 1/2	10 7/16	FP	Ow	Str	M	RB	NE	P.Ow	Ow	Spi	Own AK	Ros	O4IMV	755	c	2I	156	105	37 1/2	48x3 1/2	52x4	1/2
111	706	4.4	427	60.0	138-1900	L	G	S	4-3 7/16	11 11/16	PS	Ow	Str	M	RB	NE	P.Ow	Ow	Spi	Own AK	Ros	O4IMV	755	c	2I	180	108 3/4	37 1/2	46 7/16x3 1/2	52x4	1/2
112	255	5.0	170	27.3	68-2600	L	G	C	4-2 3/8	7 5/8	PC	No	Zen	M	NE	NE	D.Fu	Pe	Blo	Cla 212	Ros	L4IHV	377	P	TX	113	65	32	40x2 1/4	50x2 1/4	1/2
113	255	5.4	182	27.3	90-3200	F	G	C	4-2 3/8	7 7/16	PC	No	Zen	M	NE	NE	P.BL	Pe	Blo	Shu 5532	Ros	L4IHV	580	G	TD	118	68	32	44x2 1/2	52x3	1/2
114	381	4.8	240	40.8	85-2500	L	G	C	7-2 5/8	12 1/2	PC	Wa	Zen	M	NE	NE	P.BL	Pe	Blo	Shu 5532	Ros	L4IHV	662	G	TD	118	68	32	44x2 1/2	52x3	1/2
115	381	4.8	240	40.8	85-2500	L	G	C	7-2 5/8	12 1/2	PC	No	Zen	M	NE	NE	P.BL	Pe	Blo	Shu 5532	Ros	L4IHV	662	G	TD	146 1/2	86 1/2	34	44x2 1/2	52x3	1/2
116	358	5.2	254	38.4	110-2800	F	G	C	7-2 7/8	10 3/4	PC	No	Zen	M	NE	NE	P.BL	Pe	Blo	Shu 5572	Ros	L4IHV	662	G	TD	139	85	32	44x2 1/2	54x3 1/2	1/2
117	462	5.1	324	45.9	125-2600	F	G	C	7-3	13 7/8	PC	No	Zen	M	NE	NE	P.BL	Pe	Blo	Shu 5572	Ros	L4IHV	770	G	TD	147	96	34	44x3	54x4	1/2
118	462	5.1	324	45.9	125-2600	F	G	C	7-3	13 7/8	PC	No	Zen	M	NE	NE	P.BL	Pe	Blo	Shu 5582B	Ros	L6IHV	1095	G	TD	Opt	Opt	36	44x3	54x4	1/2
119	282	5.0	176	33.8	73-2800	L	G	C	7-2 1/2	10 11/16	PC	No	Zen	M	AL	AL	P.BL	Lo	Spi	Tim 30000H	Ros	L4IH	254	a	TD	132	78	34	40x2 1/2	54x3	1/2
120	282	5.0	176	33.8	73-2800	L	G	C	7-2 1/2	10 11/16	PC	No	Zen	M	AL	AL	P.BL	Lo	Spi	Tim 31000H	Ros	L4IH	364	a	TD	132	78	34	40x2 1/2	54x3	1/2
121	282	5.0	176	33.8	73-2800	L	G	C	7-2 1/2	10 11/16	PC	No	Zen	M	AL	AL	P.BL	Lo	Spi	Tim 31000H	Ros	L4IH	364	a	TD	132	78	34	40x2 1/2	54x3	1/2
122	383	4.4	262	43.3	92-2400	L	G	C	7-2 5/8	13 1/4	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 33020H	Ros	L4IH	364	a	TD	156	101	34	40x2 1/2	54x3	1/2
123	383	4.4	262	43.3	92-2400	L	G	C	7-2 5/8	13 1/4	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 33020H	Ros	L4IH	405	a	TD	156	101	34	41 1/2x2 1/2	54x3	1/2

Line Number	Make and Model	GENERAL (See Keynote): Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight	Chassis Wt. (Stripped)	TIRE SIZE: Front	Rear	MAJOR UNITS: ENGINE: Make and Model	No. of Cylinders Bore and Stroke	TRANSMISSION: Make and Model	Location and Forward Speeds	Aux. Location and Speeds	REAR AXLE: Make and Model	Gear and Type	Drive and Torque	GEAR RATIOS: In High	In Low	FRAME: Side Rail Dimensions	Type
1	Moreland (Con.) E22	6	3405	184	Op	22000	7150	B9.75/20	DB9.75/20	Her WXC3	6-4¼x4½	BL 524	U 4	No	Tim 65720H	WF	R	7.25	44.5	9 1/16x3½x3/16	T
2	H26	6	4815	196	Op	26000	8900	B9.75/20	DB9.75/20	Her RXB	6-4⅝x5¼	BL 524	U 4	No	Tim 66720W	WF	R	8.20	59.8	9½x3 11/16x5/16	T
3	Omort 20	2	1095	131	210	10000	3725	B6.00/20	DB6.00/20	Her JXA	6-3⅜x4¼	WG T9	U 4	No	Tim 53200H	BF	H	6.20	39.6	6x2¾x¼	L
4	25	2½	2650	130	130	16000	6100	P32x6	DP32x6	Her WXB	6-3¾x4½	Fu MGU	U 4	No	Wis 6787L	2F	R	6.41	41.6	6x3½x3/16	I
5	30	3	3250	134	148	18000	6600	P34x7	DP34x7	Her WXB	6-3¾x4½	Fu MGOG	A 4	U 2	Wis 8817L	2F	R	7.93	65.0	6x3½x⅜	I
6	35	3½	3850	150	150	21000	7600	P36x8	DP36x8	Her WXC	6-4x4½	Fu MGOG	A 4	U 2	Wis 1567H	2F	R	9.11	74.7	6x3½x½	I
7	Pierce-Arrow 13S385	2-2½	2500	160	200	13000	5750	B8.25/20	DB8.25/20	Own 8	8-3½x5	Co RU4SL	U 4	No	Tim 56200	SF	R	5.28	32.6	7⅝x3½x3/16	C
8	15T298	3-3½	1950	150	200	15000	5725	B8.25/20	DB8.25/20	Her WXB	6-3¾x4½	Cla 108B	U 4	Op	Tim 56200	SF	R	6.16	40.2	7⅝x3½x3/16	C
9	17T361	3-4	2350	150	200	17000	5725	B9.00/20	DB9.00/20	Her WXC2	6-4⅛x4½	Co RU4SL	U 4	Op	Tim 58200	SF	R	6.83	42.2	7⅝x3½x3/16	C
10	18W361	3½-4½	3000	150	220	18000	6660	B9.00/20	DB9.00/20	Her WXC2	6-4⅛x4½	Co RU4SL	U 4	Op	Tim 65720	WF	R	6.8	42.	8⅛x2½x3/16	C
11	19R479	3½-4½	3600	150	220	19000	7850	B9.00/20	DB9.00/20	Her YXC3	6-4⅝x4¾	Co TNU	U 4	Op	Tim 65720	WF	R	5.4	286.	8⅛x2½x3/16	C
12	24X479	5-6	4150	150	200	24000	9250	B10.50/20	DB10.50/20	Her YXC3	6-4⅝x4¾	Co TNU	U 4	Op	Tim 66720	WF	R	7.6	402.	9⅛x2½x3/16	C
13	28M611	6-7	5400	160	200	28000	11600	B10.50/24	DB10.50/24	Her GXA	6-4¾x5¾	Own	A 4	Op	Own	WF	R	10.	525.	9⅛x2½x3/16	C
14	Reo (A) BN	1500 lb.	530	130	130	5500	2805	B6.50/18	B6.50/18	Own	6-3⅛x5	Own	U 3		Own	B½	H	4.9	16.1	7½x2½x3/16	C
15	1B, (1D)	1½	595	140	164	10500	3260	B6.00/20	DB6.00/20	Own	6-3⅛x5	Own	U 4	O 2	Own	SF	H	5.38	34.8	7x2¾x3/16	C
16	2B-2D	2	845	142	166	12500	3865	B6.50/20	DB6.50/20	Own	6-3⅜x5	Own	U 4	O 2	Own	SF	H	5.83	38.4	7x3x¼	C
17	2H (2J, 2K)	2½	1245	142	184	15000	4475	B7.00/20	DB7.00/20	Own	6-3⅜x5	Own	U 4	O 2	Own	SF	H	6.6	42.9	7x¼x3	C
18	3H(3J,3K,3M)	3	1795	170	205	17500	5125	B7.50/20	DB7.50/20	Own	6-3⅜x5	Own	U 4	O 2	Own	SF	H	6.5	42.9	8 3/16x¼x3	C
19	4H,4J,4K,4M	4	2595	170	205	20000	6280	B9.00/20	DB9.00/20	Own	8-3⅜x5	Own	U 4	O 2	Own	SF	H	6.14	40.5	10x3x¼	C
20	Schacht 10H	1½-2½	1295	166	199	11500	4850	B6.50/20	DB6.50/20	Con 20C	6-3⅜x4⅝	BL 35	U 4	No	Tim	BF	H	5.83	31.2	6x3x¼	P
21	15HA	2½-3½	1735	160	199	13000	5200	B8.25/20	DB8.25/20	Con 20C	6-3⅜x4⅝	BL 35	U 4	No	Tim	BF	H	6.06	38.5	6x3x¼	P
22	20HA	2½-4	2185	160	199	15300	5450	B8.25/20	DB8.25/20	Her WXC	6-4x4½	Own	U 5	No	Tim	BF	H	6.06	38.5	6x3x¼	P
23	25HA	3-4½	2695	146	213	19500	5750	B9.00/20	DB9.00/20	Her WXC	6-4x4½	Fu 5A-38	U 5	No	Tim	BF	R	6.02	39.2	7x3x¼	P
24	23HA	4-5½	3050	146	227	23000	6600	B9.75/20	DB9.75/20	Her WXC	6-4x4½	Fu 5A-38	U 5	No	Tim	BF	R	6.83	43.8	7x3x¼	P
25	30HA	4½-6	3295	146	227	23000	6800	B9.75/20	DB9.75/20	Her WXC	6-4x4½	Fu 5A-38	U 5	No	Wis	2F	R	7.14	46.4	7x3x¼	P
26	35HA	5-7	3725	146	227	24000	7400	B9.75/20	DB9.75/20	Her WXC2	6-4⅛x4½	Fu 5A-38	U 5	No	Own	2F	R	8.00	52.0	8⅛x3x3/16	P
27	40H	5-7	4295	156	239	25500	7600	B9.75/20	DB9.75/20	Her YXC	6-4⅜x4¾	Fu 5A-53	U 5	No	Own	2F	R	7.07	49.7	8⅛x3x3/16	P
28	40HB	7-9	4695	156	239	29500	7750	B10.50/20	DB10.50/20	Her YXC	6-4⅜x4¾	Fu 5A-53	U 5	No	Wis	2F	R	7.07	49.7	8⅛x3x3/16	P
29	66HA	8-11	5895	154	251	35000	9820	B10.50/24	DB10.50/24	Her RXC	6-4⅝x5¼	Fu 5A-53	U 5	No	Wis	2F	R	7.07	49.8	8⅛x3x3/16	P
30	(T) TRD	10	4150	150	174	35000	7100	B9.00/20	DB9.00/20	Her YXC	6-4⅜x4¾	Fu 5A-53	U 5	No	Own	2F	R	7.8	56.8	7x3x¼	P
31	(T) TRDA	12	4350	150	174	39000	7226	B9.75/20	DB9.75/20	Her YXC3	6-4⅝x4¾	Fu 5A-53	U 5	No	Own	2F	R	7.8	56.8	7x3x¼	P
32	(T) TRDB	15	4595	150	174	45000	7326	B9.75/20	DB9.75/20	Her RXC	6-4⅝x5¼	Fu 5A-53	U 5	No	Wis	2F	R	7.8	56.8	7x3x¼	P
33	Sterling FB40	1½-2	1135	142	162	11000	3450	B6.50/20	DB6.50/20	Con 25A	6-3⅜x4	WG T9	U 4	No	Own	BF	H	5.66	36.2	6x2⅝x3/16	C
34	FB50	2-2½	1240	142	162	11500	3650	B7.00/20	DB7.00/20	Con 25A	6-3⅜x4	WG T9	U 4	No	Own	BF	H	5.66	36.2	6x2⅝x3/16	C
35	FB60	2½-3	1590	142	162	14000	4150	B7.00/20	DB7.00/20	Wau TL	6-3⅝x4⅜	WG T9	U 4	No	Own	BF	H	5.83	37.3	6x2⅝x3/16	C
36	FB70	2½-3	2635	174	204	17000	5755	B7.50/20	B7.50/20	Wau ML	6-4x4¾	Own UC7	U 5	No	Own	BF	R	7.4	52.7	10x3¼x¼	L
37	FD80	3-4	3065	174	204	21000	6680	B8.25/20	DB8.25/20	Wau 6ML	6-4x4¾	Own UC7	U 5	Op	Own	2F	R	7.8	55.3	10x3¼x¼	L
38	FB80 Spec	3½-4	3010	174	204	21000	6680	B8.25/20	B8.25/20	Wau ML	6-4x4¾	Own UC7	U 5	No	Own	BF	R	7.8	55.6	10x3¼x¼	L
39	FC90	4	4105	174	204	22000	7480	B9.00/20	DB9.00/20	Wau 6MK	6-4⅛x4¾	Own UC7	U 5	Op	Own	CD	R	8.66	61.7	10x3¼x¼	L
40	• FD90	4	3315	174	204	22000	7480	B9.00/20	B9.00/20	Wau MK	6-4⅛x4¾	Own UC7	U 5	No	Own	2F	R	8.0	57.0	10x3¼x¼	L
41	FD97S	4-5	4355	192	222	26000	8200	P36x8	DP36x8	Wau 6SRL	6-4⅜x5⅛	Own UC2	U 4	Op	Own	w/2F	R	7.75	51.6	12x3¼x¼	L
42	FC100	5-5½	4185	192	222	26000	7750	P36x8	DP36x8	Wau 6MK	6-4⅛x4¾	Own UC2	U 4	Op	Own	CD	R	9.3	61.2	12x3¼x¼	L
43	• FD115	5-6	4690	192	222	32000	8750	P40x8	DP40x8	Wau 6SRL	6-4⅜x5⅛	Own UC2	U 4	Op	Own	w/2F	R	8.20	54.6	12x3¼x¼	L
44	FC107	5-6	4700	192	222	27000	8200	P36x8	DP36x8	Wau 6SRL	6-4⅜x5⅛	Own UC2	U 4	Op	Own	CD	R	8.20	54.6	12x3¼x¼	L
45	• FD140	7-8	6285	192	222	35000	10050	P40x8	DP42x9	Wau 6-125	6-4⅜x5⅛	Own UC2	U 4	Op	Own	w/2F	R	10.0	66.6	15x3¼x¼	L
46	• FC135	7-8	4800	192	222	35000	8900	P40x8	DP40x8	Wau SRL	6-4⅜x5⅛	Own UC2	U 4	Op	Own	CD	R	9.3	62.2	15x3¼x¼	L
47	• FC140	8-8½	5245	200	230	36000	9350	P40x8	DP40x8	Wau 6-125	6-4⅜x5⅛	Own UC2	U 4	Op	Own	CD	R	8.3	55.2	15x3¼x¼	L
48	• FC145	8-8½	6180	200	230	37000	10100	P40x8	DP40x8	Wau AB	6-4½x5¾	Own UC8	U 4	Op	Own	CD	R	9.4	58.9	15x3¼x¼	L
49	• FW170, FD170	9½-10½	6980	200	230	35000	10550	P40x8	DP44x10	Wau AB	6-4½x5¾	Own UC8	U 4	Op	Own	w/2F	R	10.0	62.7	15x3¼x¼	L
50	• FC170	9½-10½	6900	200	230	40000	10550	P40x8	DP42x9	Wau RB	6-5x5¾	Own UC8	U 4	Op	Own	CD	R	9.4	58.9	15x3¼x¼	L
51	FD195	12-12½	8925	200	230	39000	10750	B10.50/20	DB10.50/20	Cum H Die.	6-4⅞x6	BL 734	U 4	Op	Wis 1910W	2F	R	8.88	55.8	15x3¼x¼	L
52	Stewart 41X	¾	695	124	124	....	2875	B6.50/18	B6.50/18	Lyc	6-3¼x4½	WG	U 4	No	Cla	S½	H	5.4	35.1	6x2¼x3/16	T
53	41XS	1	730	134	145	....	2925	B6.50/18	B6.50/18	Lyc	6-3¼x4½	WG	U 4	No	Cla	S½	H	5.4	35.1	6x2¼x3/16	T
54	44X	1½	760	134	176	8500	3250	B6.50/20	B6.50/20	Lyc	6-3¼x4½	WG	U 4	No	Cla	SF	H	5.61	35.8	7½x2¾x5/32	T
55	42X	1¾	830	145	176	9000	3525	B6.50/20	B6.50/20	Lyc	6-3¼x4½	WG	U 4	No	Cla	SF	H	5.6	35.8	7½x2¾x5/32	T
56	43X	2	1075	145	176	10800	4005	B6.50/20	DB6 50/20	Lyc	6-3⅜x4½	WG	U 4	No	Cla	SF	H	6.3	41.	7½x2¾x5/32	T
57	45X	2½	1375	145	190	13500	4350	B7.00/20	DB7.00/20	Lyc	6-3⅜x4½	WG	U 4	No	Cla	SF	R	6.37	40.	7½x2¾x5/32	T
58	29XS	2½	1795	145	220	15000	5190	B7.00/20	DB7.00/20	Lyc	6-3¾x4½	BL	U 5	No	Cla	SF	R	7.16	40.	7½x2¾x5/32	T
59	32X	3	2090	165	220	18000	5460	B7.00/20	DB7.00/20	Lyc	6-3¾x4½	BL	U 5	No	Cla	SF	R	7.16	40.	9x2¾x3/16	T
60	58-8	3	2290	170	226	18000	6025	B7.50/20	DB7.50/20	Lyc	8-3⅜x4½	Fu	U 5	No	Cla	SF	R	7.1	47.	9x2¾x3/16	T
61	18X	3½	2690	165	220	20000	6600	B7.50/20	DB7.50/20	Lyc	6-3⅞x5	Fu	U 5	No	Tim	WF	R	7.25	47.5	9x2¾x3/16	T
62	48-8	3½	2990	170	241	20000	6750	B8.25/20	DB8.25/20	Lyc	8-3¾x4¾	BL	U 5	No	Cla	WF	R	7.1	47.	9x2¾x3/16	T
63	19X	3½	3690	165	235	20000	7110	B9.00/20	DB9.00/20	Lyc	6-3⅞x5	Fu	U 4	A 3	Tim	WF	R	7.25	48.	9x2¾x3/16	T
64	38-6	3½-5	3990	170	241	23000	7600	B9.00/20	DB9.00/20	Wau	6-4⅜x5½	BL	U 5	A 3	Tim	WF	R	7.25	48.	9x2¾x3/16	T
65	38-8	3½-5	3990	170	241	23000	7600	B9.00/20	DB9.00/20	Lyc	8-3¾x4¾	BL	U 5	A 3	Tim	WF	R	7.25	48.	9x2¾x3/16	T
66	31X	5-6	5390	165	235	30000	9340	B9.75/20	DB9.75/20	Wau	6-4⅝x5⅛	BL	U 4	A 3	Tim	WF	R	8.2	148.	9 3/16x2¾x3/16	T
67	27XS	7-8	6190	165	235	33000	10300	B10.50/24	DB10.50/24	Wau	6-4⅝x5⅛	BL	U 4	A 3	Tim	WF	R	10.1	148.	9 3/16x2¾x3/16	T
68	Stud. T230-(241 265)	1½-2	625	130	165	9000	3110	B6.00/20	P32x6	Own	6-3¼x4⅝	WG T9	U 4	No	Cla B373	SF	H	5.66	36.2	7x2¾x3/16	T
69	T430-(441-465)	1¾-2½	785	130	165	10500	3445	B6.00/20	DB6.50/20	Own	6-3¼x4⅝	WG T9	U 4	No	Cla B412	SF	H	6.8	43.5	7x2¾x3/16	T
70	T641-(653-665)	2-3	945	141	165	12000	4095	B6.50/20	DB6.50/20	Own	6-3¼x4⅝	WG T9	U 4	No	Tim 54200	SF	H	6.8	43.5	7x2¾x5/32	T
71	T841-(865-883)	3-4	1345	141	183	16000	4875	B6.50/20	DP32x6	Own	6-3¼x4⅝	WG T9	U 4	A 2	Tim 58200	SF	H	7.8	75.8	8x2¾x¼	T
72	W-841 (865-883)	3-4	1795	141	183	16600	.....	B6.50/20	DP32x6	Wau 6-110	6-4x4¾	Cla R900	U 5	No	Tim 58200	SF	H	6.8	55.2	8x2¾x¼	T
73	Ward La Fr. 25R14	2½	2800	196	208	14000	6000	B7.50/20	DB7.50/20	Wau ML	6-4x4¾	BL 324	U 4	No	Tim 54200H	SF	R	Opt	Opt	12x3x¼	B
74	25R16	3	2975	197	208	16000	6200	B8.25/20	DB8.25/20	Wau ML	6-4x4¾	BL 324	U 4	No	Tim 56200H	SF	R	Opt	Opt	12x3x¼	B
75	25R18	3-4	3275	196	208	18000	6400	B9.00/20	DB9.00/20	Wau MK	6-4⅛x4¾	BL 324	U 4	No	Tim 58205H	SF	R	Opt	Opt	12x3x¼	B
76	30R19	4	3675	197	226	19000	7000	B9.00/20	DB9.00/20	Wau MK	6-4⅛x4¾	BL 524	U 4	No	Tim 65200H	WF	R	Opt	Opt	12x3¼x3/16	B
77	320	3-4	3825	197	226	19000	7175	B9.00/20	DB9.00/20	Wau SRL	6-4⅜x5⅛	BL 534	U 4	No	Tim 58205H	SF	R	Opt	Opt	12x3¼x5/32	B
78	30R-20	3-4	4300	196	226	20000	7260	B9.00/20	DB9.00/20	Wau SRL	6-4⅜x5⅛	BL 534	U 4	No	Tim 65200H	WF	R	Opt	Opt	12x3¼x5/32	B
79	30R23	5	4175	196	226	23000	7300	B9.75/20	DB9.75/20	Wau MK	6-4⅛x4¾	BL 524	U 4	No	Tim 65720H	WF	R	Opt	Opt	12x3¼x5/32	B
80	35R	5-6	4975	196	226	25000	8700	B9.75/20	DB9.75/20	Wau SRL	6-4⅜x5⅛	BL 534	U 4	No	Tim 65720H	WF	R	Opt	Opt	12x3¼x3/16	B
81	335RWS	7½	5450	205	224	26000	9360	B9.75/24	DB9.75/24	Wau SRL	6-4⅜x5⅛	BL 534	U 4	No	Tim 65720W	WF	R	Opt	Opt	14x3x¼	B
82	75RH	7½	6350	210	231	30000	10500	B10.50/20	DB10.50/20	Wau RB	6-5x5¾	BL 734	U 4	No	Tim 66720H	WF	R	Opt	Opt	14x3¼x¼	T
83	55RH	7½	5350	203	224	30000	10000	B10.50/20	DB10.50/20	Wau SRK	6-4⅝x5⅛	BL 724	U 4	No	Tim 66720H	WF	R	Opt	Opt	14x3¼x¼	T
84	55RWS	7½	5750	205	224	30000	10050	B10.50/20	DB10.50/20	Wau SRK	6-4⅝x5⅛	BL 724	U 4	No	Tim 66720W	WF	R	Opt	Opt	14x3¼x¼	T
85	50D	7½-10	5975	159	173	36000	11000	P40x8	DP40x8	Wau SRL	6-4⅜x5⅛	BL 724	U 4	No	Tim 68702D	WF	R	Opt	Opt	14x3¼x¼	T
86	100RW	10	7350	210	231	36000	11500	B10.50/24	DB10.50/24	Wau RB	6-5x5¾	BL 734	U 4	No	Tim 68720W	WF	R	Opt	Opt	14x3¼x¼	T
87	75RWS	10	6750	211	231	30000	11300	B10.50/20	DB10.50/20	Wau RB	6-5x5¾	BL 734	U 4	No	Tim 66720W	WF	R	Opt	Opt	14x3¼x¼	T
88	White (12) 60K	1¼-1½	1850	112	112	....	3905	B7.00/20	B7.00/20	Own 2A	6-3½x4½	Own 3BC	U 3	No	Own 4C	S½	H	5.87	22.2	5x3x3/16	C
89	701	1¼-1½	1085	132	156	....	3970	B7.00/20	B7.00/20	Own 8A	6-3 5/16x4⅝	Own 18BA	U 4	No	Own 19CA	SF	H	5.88	37.6	7x2¾x5/32	C
90	701A	1½	1110	132	156	....	4000	B7.50/20	B7.50/20	Own 8A	6-3 5/16x4⅝	Own 183A	U 4	No	Own 19CA	SF	H	5.88	37.6	7x2¾x5/32	.....
91	161	1¼-1½	1700	138	157	....	4420	B7.50 20	B7.50/20	Own GRCB	4-4x5¾	Own 8B	U 4	No	Own 4C	S½	H	4.73	19.5	6x2⅝x3/16	C
92	702	1½-2	1185	132	156	....	4225	B7.00/20	DB7.00/20	Own 8A	6-3 5/16x4⅝	Own 18BA	U 4	No	Own 19CA	SF	H	5.88	37.6	7x2¾x5/32	C
93	702A	2	1222	132	156	....	4275	B7.50/20	DB7.50/20	Own 8A	6-3 5/16x4⅝	Own 18BA	U 4	No	Own 19CA	SF	H	5.88	37.6	7x2¾x5/32	.....
94	162	1½-2	1900	138	157	....	4710	B7.00/20	DB7.00/20	Own GRCB	4-4x5¾	Own 8B	U 4	No	Own 4CB	S½	H	4.73	19.5	6x2⅝x3/16	C
95	611	2-2½	2450	148	196	....	4960	B7.00/20	DB7.00/20	Own 4AB	6-3¾x4½	Own 5B	U 4	No	Own 7C	S½	H	5.67	23.4	6⅝x3 3/16x¼	C
96	211	2-2½	2300	148	198	....	5170	B7.00/20	DB7.00/20	Own GRCB	4-4x5¾	Own 8B	U 4	No	Own 7C	S½	H	5.67	23.4	6⅝x3 3/16x¼	C
97	612	2½-3	2800	148	196	....	5295	B7.50/20	DB7.50/20	Own 4AB	6-3¾x4½	Own 5B	U 4	No	Own 7CB	S½	H	5.67	23.4	6⅝x3 3/16x¼	C
98	212	2½-3	2650	148	198	....	5500	B7.50/20	DB7.50/20	Own GRCB	4-4x5¾	Own 8B	U 4	No	Own 7CB	S½	H	5.67	23.4	6⅝x3 3/16x¼	C
99	620	2½-3	4350	157	195	....	7430	B8.25/20	DB8.25/20	Own 7A	6-4 3/16x5¼	Own 4B	U 4	No	Own 14C	SF	R	6.38	41.8	7 11/16x2 11/16x5/32	C
100	612K	2½-3	2950	140	180	....	5445	B7.50/20	DB7.50/20	Own 4AB	6-3¾x4½	Own 5B	U 4	No	Own 7CB	S½	H	5.67	23.4	6⅝x3 3/16x¼	C
101	51A	2½-4	3750	170	190	....	6438	S36x5°	S36x8°	Own GRB	4-4¼x5¾	OwnGRBA	U 4	No	Own 51A	S½	R	7.14	35.6	8x3x¼	C
102	618	3-4	3600	166	206	....	6675	B9.00/20	DB9.00/20	Own 4AB	6-3¾x4	Own 11BA	U 5	No	Own 14CB	2F	R	8.15	61.8	8x3¾x¼	C
103	621	3-4	4650	157	195	....	7945	B9.00/20	DB9.00/20	Own 7A	6-4 3/16x5¼	Own 4B	U 4	No	Own 10C	SF	R	6.33	41.4	7 11/16x2 11/16x5/32	C
104	618K	3-4	3750	158	198	....	6820	B9.00/20	DB9.00/20	Own 4AB	6-3¾x4½	Own 11BA	U 5	No	Own 14CB	2F	R	8.15	61.8	8x3¾x¼	C
105	620K	3-4	4675	168	215	....	7825	B9.00/20	DB9.00/20	Own 7A	6-4 3/16x5¼	Own 4B	U 4	No	Own 14CB	SF	R	7.32	47.9	8x3x¼	C
106	630	3-4½	5000	168	215	....	8500	B9.00/20	DB9.00/20	Own 7A	6-4 3/16x5¼	Own 4B	U 4	No	Own 10C	SF	R	6.33	41.4	8x3x¼	C
107	630K	3-4½	5200	168	214	....	9290	B9.00/20	DB9.00/20	Own 7A	6-4 3/16x5¼	Own 4B	U 4	No	Own 10C	SF	R	63.3	41.4	8x3x¼	C
108	640	3-4½	6100	180	214	....	9510	B9.00/20	DB9.00/20	Own 5AC	6-4⅝x5¾	Own 10B	U 4	No	Own 10C	SF	R	5.18	33.2	8⅛x3 3/16x3/16	C
109	640K	3-4½	6300	180	214	....	10200	B9.00/20	DB9.00/20	Own 5AC	6-4⅝x5¾	Own 10B	U 4	No	Own 10C	SF	R	5.18	32.2	8⅛x3 3/16x3/16	C
110	58	3-5	4400	180	195	....	7797	S36x5°	DS36x5°	Own GRB	4-4¼x5¾	Own 4B	U 4	No	Own 2C	2F	R	7.6	49.7	8⅛x3 3/16x3/16	C
111	58-SS	7½	5300	196	196	....	9300	B10.50/24	DB10.50/24	Own GRB	4-4¼x5¾	Own 4B	U 4	No	Own 6C	2F	R	11.8	77.5	10⅛x3x3/16	C
112	55	5	4650	174	215	....	8737	S36x5°	DS40x5	Own GRB	4-4¼x5¾	OwnGRBA	U 4	No	Own 55	2F	R	10.1	66.1	8x18.4 lb.	I
113	631	3½-6	5750	168	215	....	9000	B9.75/20	DB9.75/20	Own 7A	6-4 3/16x5¼	Own 4B	U 4	No	Own 2C	2F	R	8.70	56.9	8x3x¼	C
114	631K	3½-6	5950	168	215	....	9250	B9.75/20	DB9.75/20	Own 7A	6-4 3/16x5¼	Own 4B	U 4	No	Own 2C	2F	R	8.70	56.9	8x3x¼	C
115	631X	7½	6100	215	215	....	10000	B10.50/20	DB10.50/20	Own 7A	6-4 3/16x5¼	Own 4B	U 4	No	Own 2C	2F	R	10.15	66.4	8⅛x3 3/16x3/16	C
116	641	3½-6	6450	180	214	....	10010	B9.75/20	DB9.75/20	Own 5AC	6-4⅝x5¾	Own 10B	U 4	No	Own 2C	2F	R	7.16	44.5	8⅛x3 3/16x3/16	C
117	641K	3½-6	6650	180	214	....	10260	B9.75/20	DB9.75/20	Own 5AC	6-4⅝x5¾	Own 10B	U 4	No	Own 2C	2F	R	7.16	44.5	8⅛x3 3/16x3/16	C
118	642	4-7½	6750	180	214	....	10910	B9.75/24	DB9.75/24	Own 5AC	6-4⅝x5¾	Own 10B	U 4	No	Own 13C	2F	R	10.2	63.4	8⅛x3 3/16x3/16	C
119	52	5-7½	5100	174	215	....	9409	S36x6°	S40x12	Own GRB	4-4¼x5¾	OwnGRBA	U 4	No	Own 52	2F	R	11.7	58.4	8x18.4 lb.	I
120	643	5-9	6950	180	214	....	11210	B10.50/24	DB10.50/24	Own 5AC	6-4⅝x5¾	Own 10B	U 4	No	Own 13C	2F	R	10.2	63.4	8⅛x3 3/16x3/16	C
121	691	7-9	7250	129	129	....	12200	B10.50/24	DB10.50/24	Own 5AD	6-4⅝x5¾	Own 10BB	U 5	No	Own 13CB	2F	R	10.2	63.4	8¼x3¾x⅜	C
122	Willys 77	....	445	100	100	....	.....	B5.00/17	B5.00/17	Own 77	4-3⅛x4⅜	Own 77	U 3	No	Own 77	S½	H	4.3	12.5	3¾x1¾x3/16	T

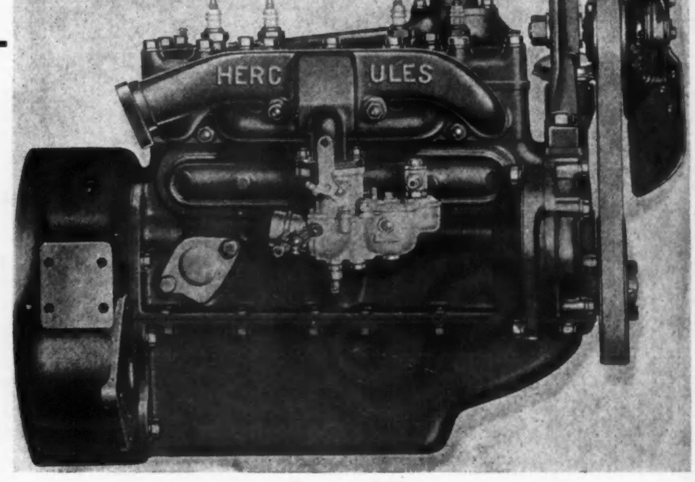
Line Number	Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	Main Bearings: Number and Diameter	Main Bearings: Length	Oiling System Type	Governor Make	Fuel Syst.: Carburetors Make	Fuel Syst.: Fuel Feed	Electrical: Ignition System Make	Electrical: Generator, Starter Make	Clutch Type and Make	Radiator Make	Universals Make	Front Axle: Make and Model	Steering Gear Make	Brakes, Service: Make, Location Type Operation	Brakes, Service: Lining Area	Brakes, Service: Drum Material	Brakes: Hand Location, Type	Body Mounting Data: Cab to Rear of Frame	Body Mounting Data: Cab to Rear Axle	Body Mounting Data: Width of Frame	Springs: Front	Springs: Rear	Springs: Auxiliary Type
1	383	4.4	262	43.3	92-2400	L	G	C	7-2⅝	13¼	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 35120H	Ros	L4IH	555	a	TD	156	101	34	41½x2½	54x3	½
2	501	4.9	330	48.6	110-2200	L	G	C	7-3	12½	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim26450TW	Ros	W4IA	620	a	TD	168	111¼	34	42x3	56x3½	½
3	228	4.4	143	27.3	60-2400	L	G	C	7-2½	10 11/16	PC	No	Til	M	AL	AL	D.Jo	Pe	Blo	Tim 30000H	Ros	L4IH	249	p	FD	81¾	51½	34	36x2¼	45x2½	½
4	298	4.7	190	33.7	66-2400	L	G	C	7-2⅝	13¼	PC	No	Zen	M	AL	AL	D.Fu	Yo	Blo	Shu 5429	Ros	L4IH	406	G	TD	84	53½	31	40x2½	54x3	
5	298	4.7	190	33.7	66-2400	L	G	C	7-2⅝	13¼	PC	No	Zen	M	AL	AL	D.Fu	Yo	Blo	Shu 5532	Ros	L4IH	406	G	TD	88	57½	31	40x2½	54x3	½
6	339	4.7	225	38.4	73-2000	L	G	B	7-2⅝	13¼	PC	No	Zen	M	AL	AL	D.Fu	Yo	Blo	Shu 5532	Ros	L4IH	498	G	TD	108	74	31	40x2½	54x3	½
7	385	5.0	274	39.2	125-2800	L	C	A	9-2⅝	14⅛	CC	Ha	Str	M	DR	DR	P.Lo	Lo	Cle	Tim 14706	Ha	B4IM	399	D	TD	116¾	62½	34	38x2½	56x3	½
8	298	4.7	190	33.7	70-2600	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 14706	Ha	B4IM	399	D	TD	113½	59½	34	38x2½	56x3	½
9	361	4.7	230	40.3	77-2400	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 14706	Ha	B4IM	399	D	CD	143½	89½	34	38x2½	56x3	½
10	361	4.7	230	40.3	77-2400	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15735	Ha	B4IA	473	D	CD	119½	65	34	41x2½	56x3	½
11	479	4.7	318	51.3	104-2200	L	G	A	7-3	14	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 15733	Ha	B4IA	473	D	CD	118¼	163¾	34	41x2½	56x3	½
12	479	4.6	318	51.3	104-2200	L	G	A	7-3	14	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Cle	Tim 26050	Ha	B4IA	473	D	CD	168¼	33¾	34	41x2½	56x3	½
13	611	4.5	410	54.1	130-2000	L	G	A	7-3½	16⅝	PC	Ha	Zen	M	DR	DR	P.Lo	Lo	Spi	Tim 26050	Ros	BO4IA	720	D	TX	127	72½	34	41x3	56x4	½
14	230	5.3	152	23.4	68-2800	L	C	A	7-2 1/16	12	CC	No	Str	M	DR	DR	P.Ow	Ow	Cle	Own	Ros	L4IH	280	P	2I	.....	.....	.....	38½x2	57x2¼	N
15	230	5.3	152	23.4	68-2800	L	C	A	7-2 1/16	12	CC	No	Str	M	DR	DR	P.Ow	Ow	Cle	Own	Ros	L4IH	246	C	2I	102	60	34	40x2	50x2½	O
16	268	4.9	175	27.3	75-2800	L	C	A	7-2⅝	12	CC	No	Str	M	DR	DR	P.Ow	Ow	Cle	Own	Ros	L4IH	289	a	2I	105	60	34	40x2¼	52x2½	½
17	268	4.9	175	27.3	75-2800	L	C	A	7-2⅝	12	CC	No	Str	M	DR	DR	dp.Lo	Mc	Cle	Own	Ros	L4IH	289	a	2I	116	60	34	40x2½	52x2½	½
18	309	4.9	200	31.5	85-2800	L	C	A	7-2⅝	12	CC	No	Str	M	DR	DR	dp.Lo	Mc	Cle	Own	Ros	L4IH	344	a	FD	124	68	34	44x3	54x3	½
19	358	4.9	230	36.4	110-2800	L	C	A	9-2⅝	12½	CC	Mo	Sch	M	DR	DR	dp.Lo	Mc	Cle	Own	Ros	L4IHV	390	a	FD	143	83	34	44x3	56x3½	½
20	248	5.1	150	27.3	65-2600	L	G	C	7-2⅝	10⅜	FP	No	Str	M	DR	DR	D.BB	Yo	Spi	Tim	Ros	L4IH	380	G	TX	129½	Opt	31½	40x2½	50x3	½
21	248	5.1	150	27.3	65-2600	L	G	C	7-2⅝	10⅜	FP	No	Str	M	DR	DR	D.BB	Yo	Spi	Tim	Ros	L4IHV	452	G	TX	129½	Opt	31½	40x2½	50x3	½
22	339	4.7	225	38.4	73-2200	L	G	C	7-2⅝	13¼	PC	Mo	Str	M	AL	AL	D.BB	Yo	Spi	Tim	Ros	L4IHV	452	G	TX	129½	Opt	31½	40x2½	50x3	½
23	339	4.7	225	38.4	73-2200	L	G	C	7-2⅝	13¼	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Tim	Ros	L4IHV	578	G	TX	106	Opt	31½	40x2½	50x3	½
24	339	4.7	225	38.4	73-2200	L	G	C	7-2⅝	13¼	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	658	G	TX	106	Opt	31½	40x2½	50x3	½
25	339	4.7	225	38.4	73-2200	L	G	C	7-2⅝	13¼	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	658	G	TX	106	Opt	31½	40x2½	50x3	½
26	360	4.7	238	40.3	80-2200	L	G	C	7-2⅝	13¼	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	768	H	TD	106	Opt	31½	40x2½	50x3	½
27	428	4.4	280	45.9	93-2200	L	G	C	7-3	15	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	768	H	TD	106	Opt	31½	40x2½	50x3	½
28	428	4.4	280	45.9	93-2200	L	G	C	7-3	15	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	893	G	TD	106	Opt	31½	40x2½	50x3	½
29	529	4.9	355	51.2	115-2200	L	G	C	7-3	15	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Own	Ws4IA	847	G	TD	118	Opt	31½	42x3	60x3½	½
30	428	4.4	280	45.9	93-2200	L	G	C	7-3	15	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	893	H	TD	92 1/16	Opt	31½	40x2½	50x3	½
31	478	4.4	318	51.2	103-2200	L	G	C	7-3	15	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	893	H	TD	92 1/16	Opt	31½	40x2½	50x3	½
32	529	4.4	355	51.2	115-2200	L	G	C	7-3	15	PC	Mo	Str	M	AL	AL	D.Fu	Yo	Spi	Shu	Ros	L4IHV	893	H	TD	92 1/16	Opt	31½	40x2½	50x3	½
33	214	5.0	137	28.0	72-3300	L	C	A	4-2⅜	6⅜	CC	No	Zen	M	DR	DR	P.Lo	Pe	Spi	Tim 30000H	Ros	L4IH	269	P	TX	96	57	34	38x2¼	50x2½	N
34	214	5.0	137	28.0	72-3300	L	C	A	4-2⅜	6⅜	CC	No	Zen	M	DR	DR	P.Lo	Pe	Spi	Tim 30000H	Ros	L4IH	269	P	TX	96	57	34	38x2¼	50x2½	½
35	255	5.0	175	28.0	68-2600	L	G	C	4-2⅜	7⅝	CC	No	Zen	M	DR	DR	P.Lo	Pe	Spi	Tim 31000H	Ros	L4IH	282	P	TX	96	57	34	38x2¼	50x2½	½
36	358	4.4	230	38.4	80-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 31000H	Ros	L4IHV	330	a	CX	144	91	34	42x2½	54x3	½
37	358	4.4	230	38.4	80-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 33000H	Ha	L4IHV	396	a	CX	144	91	34	42x2½	54x3	½
38	358	4.4	230	38.4	80-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 33000H	Ha	L4IHV	392	a	CX	144	91	34	42x2½	54x3	½
39	381	4.4	240	40.8	85-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 33000H	Ha	O2IMV	466	s	JX	144	91	34	42x2½	54x3	½
40	381	4.4	240	40.8	85-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 33000H	Ha	L4IHV	397	a	CX	144	91	34	42x2½	54x3	½
41	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 35000H	Ros	L4IHV	664	a	CX	172	108	34	48x3	54x3	½
42	381	4.4	240	40.8	85-2500	L	G	C	7-2⅝	12½	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 35000H	Ros	O2IMV	576	a	JX	172	108	34	48x3	54x3	½
43	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 35000H	Ros	L4IHV	664	a	CX	172	108	34	48x3	54x3	½
44	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 35000N	Ros	O2IMV	576	a	JX	172	108	34	48x3	54x3	½
45	462	4.5	300	45.9	125-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 26450TN	Ros	Ws4IA	690	a	CX	172	108	34	48x3	60x4	
46	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 26450N	Ros	O2IMV	500	s	JX	172	108	34	48x3	54x3	½
47	489	4.5	295	43.4	125-2400	L	G	C	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 26450N	Ros	O2IMV	666	s	JX	168	107	34	48x3	54x3	½
48	549	4.5	330	48.6	99-2000	L	G	C	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 26450N	Ros	O2IMV	666	s	JX	168	107	34	48x3	54x3	½
49	549	4.5	330	48.6	99-2000	L	G	C	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 27050TW	Ros	Ws4IA	690	a	CX	163	107	34	48x3	60x4	½
50	677	4.4	440	60.0	125-2000	L	G	A	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 27450N	Ros	O2IMV	666	s	JX	168	107	34	48x3	54x3	½
51	672	17.	420	57.0	125-1800	H	G	C	7-3¼	16½	CC	En	No	M	CI	LN	P.BL	Mo	Spi	Tim 27450TW	Ros	Ws4IA	718	a	CX	163	107	34	48x3	60x4	½
52	224	4.8	142	25.3	62-2800	L	G	C	4-2⅜	8¼	CC	No	Zen	P	DR	DR	P.BB	Fe	Spi	Spi	Ros	B4IM	180	a	4X	81	41¾	32⅛	38½x2¼	50x2½	N
53	224	4.8	142	25.3	62-2800	L	G	C	4-2⅜	8¼	CC	No	Zen	P	DR	DR	P.BB	Fe	Spi	Spi	Ros	B4IM	180	a	4X	92	51⅜	32⅛	38½x2¼	50x2½	N
54	224	4.8	142	25.3	62-2800	L	G	C	4-2⅜	8¼	CC	No	Zen	P	DR	DR	P.BB	Fe	Spi	Spi	Ros	B4IM	226	a	TX	92	51⅜	32⅛	38½x2¼	50x2½	N
55	224	4.8	142	25.3	62-2800	L	G	C	4-2⅜	8¼	CC	No	Zen	P	DR	DR	P.BB	Fe	Spi	Spi	Ros	B4IM	317	a	TX	92	51⅜	32⅛	38x2½	50x2½	N
56	242	5.	162	27.3	65-2800	L	G	C	4-2⅜	8¼	CC	No	Zen	P	DR	DR	P.BB	Fe	Spi	Spi	Ros	B4IM	317	a	TX	103¼	62⅝	32⅛	38½x2¼	50x2½	½
57	242	5.	162	27.3	65-2800	L	G	C	4-2⅜	8¼	CC	No	Zen	P	DR	DR	P.BB	Fe	Spi	Spi	Ros	B4IM	349	a	TX	104⅝	58⅝	32⅛	38½x2¼	50x3	½
58	299	5.0	193	33.8	85-2750	L	G	C	4-2⅝	9 1/16	FP	Mo	Str	P	DR	DR	P.BL	Fe	Spi	Cla	Ros	B4IM	524	a	TX	104⅝	58⅝	32⅛	38x2¼	50x3	½
59	299	5.0	193	33.8	85-2750	L	G	C	4-2⅝	9 1/16	FP	Mo	Str	P	DR	DR	P.BL	Fe	Spi	Cla	Ros	B4IM	594	a	TX	127⅞	79 1/16	32⅛	38x2¼	50x3	½
60	322	4.6	224	36.2	90-2750	L	G	C	4-2¾	10	FP	Mo	Str	P	DR	DR	P.Fu	Fe	Spi	Tim	Ros	B4IM	594	a	TX	129¾	79 11/16	32¼	40x3	56x3	½
61	354	5.2	225	36.5	90-2750	L	G	C	4-2⅝	10	FP	Mo	Str	P	DR	DR	P.Fu	Fe	Spi	Cla	Ros	B4IM	670	a	TF	126¾	79 11/16	32¼	40x3	50x3	½
62	420	5.2	300	44.4	130-2800	L	G	C	5-2¾	12¾	FP	No	Str	P	DR	DR	P.BL	Fe	Spi	Cla	Ros	B4IMV	594	a	TX	128⅛	75 1/16	32¼	40x3	56x3	½
63	354	4.6	224	36.2	90-2750	L	G	C	4-2¾	10	FP	Mo	Str	P	DR	DR	D.Fu	Fe	Spi	Eat	Ros	B4IM	670	a	TX	126¾	76¼	32¼	40x3	56x3	½
64	462	4.6	300	45.9	100-2000	L	G	C	7-3	12⅞	FP	Mo	Str	P	DR	DR	P.BL	Fe	Spi	Eat	Ros	B4IMV	670	a	TX	128⅛	75⅝	32¼	40x3	56x3	½
65	420	5.2	300	44.4	130-2800	L	G	C	5-2¾	12¾	FP	No	Str	P	DR	DR	P.BL	Fe	Spi	Eat	Ros	B4IMV	670	a	TX	128⅛	75⅝	32¼	40x3	56x3	½
66	516	4.5	330	51.2	110-2000	L	G	C	7-3	12⅞	FP	Wa	Str	P	DR	DR	P.BL	Mo	Spi	Eat	Ros	B4IMV	708	a	TX	128 1/16	73 1/16	34	40x3	56x3	½
67	516	4.5	330	51.2	110-2000	L	G	C	7-3	12⅞	FP	Wa	Str	P	DR	DR	P.BL	Mo	Spi	Eat	Ros	Ws4IA	902	a	TX	128 1/16	73 1/16	34	40x3	56x4	½
68	230	4.6	154	25.4	75-3200	L	G	C	4-2½	8 1/16	CC	No	Str	M	DR	DR	P.Lo	Mc	MM	Cla F212	Ros	B4IM	231	a	4I	83¼	48⅛	33 11/16	36x1¾	45x2½	½
69	230	4.6	154	25.4	75-3200	L	G	C	4-2½	8 1/16	CC	Ha	Str	M	DR	DR	P.Lo	Mc	MM	Cla F212	Ros	B4IMV	231	a	4I	83¼	48⅛	33 11/16	36x1¾	45x2½	O
70	230	4.6	154	25.4	75-3200	L	G	C	4-2½	8 1/16	CC	Ha	Str	M	DR	DR	dp.Lo	Mc	MM	Tim 31010	Ros	B4IMV	284	D	4I	97⅛	60	34	39x2	56x3	½
71	230	4.6	154	25.4	75-3200	L	G	C	4-2½	8 1/16	CC	Ha	Str	M	DR	DR	dp.Lo	Mc	MM	Tim 31020	Ros	B4IMV	420	a	4I	97 1/16	60	34 1/16	39x2½	56x3	½
72	230	5.1	254	38.4	110-2800	F	G	A	7-2⅞	11 7/16	FP	Wa	Str	M	DR	DR	P.Li	Mc	MM	Tim 31020	Ros	B4IMV	420	D	4I	97 1/16	60	34 1/16	39x2½	56x3	½
73	358	6.2	228	38.4	80-2400	L	G	C	7-2⅝	12½	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IHV	282	a	TD	144	90⅝	33	41x2¼	52x3	½
74	358	6.2	228	38.4	80-2400	L	G	C	7-2⅝	12½	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IHV	330	a	TD	144	90⅝	33	41x2¼	52x3	½
75	381	6.5	242	40.8	85-2500	L	G	C	7-2⅝	12½	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L4IHV	391	a	TD	144	90⅝	33	41x2¼	52x3	½
76	381	6.5	242	40.8	85-2500	L	G	C	7-2⅝	12½	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35000H	Ros	L4IHV	391	a	TD	168	105 1/16	33	41x2¼	52x3	½
77	462	6.5	300	45.9	102-2400	L	G	C	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35000H	Ros	L4IHV	391	a	TD	168	105 1/16	33	41x2¼	52x3	½
78	462	6.5	300	45.9	102-2400	L	G	C	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35000H	Ros	L4IHV	391	a	TD	168	105 1/16	33	41x2¼	52x3	½
79	381	6.5	242	40.8	85-2500	L	G	C	7-2⅝	12½	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35000H	Ros	L4IHV	460	a	TD	168	105 1/16	33	41x2¼	52x3	½
80	462	6.6	300	45.9	102-2200	L	G	C	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35000H	Ros	L4IHV	460	a	TD	168	105 1/16	33	41x2¼	52x3½	½
81	462	6.6	300	45.9	102-2400	L	G	C	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim35100TW	Ros	Ws4IA	617	a	TD	207	115¾	33	42x3	56x3½	½
82	677	5.5	465	60.	145-2000	L	G	C	4-3¼	11¾	FP	Wa	Zen	M	DR	DR	dp.BL	Pe	Spi	Tim27452H	Ros	L4IHV	560	a	TD	192	117⅛	33	42x3	56x3½	½
83	517	4.6	335	51.3	110-2300	L	G	C	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35100H	Ros	L4IHV	560	a	TD	192	117⅛	33	40x3	56x3½	½
84	517	4.6	335	51.3	110-2300	L	G	C	7-3	13⅞	FP	Wa	Zen	M	DR	DR	dp.BL	Pe	Spi	Tim35100TW	Ros	Ws4IA	617	a	TD	207	115¾	33	40x3	56x3½	½
85	462	6.5	300	45.9	102-2400	L	G	C	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 16302	Ros	T2IMV	470	a	TD	124	88	37	44x3	56x3½	½
86	677	5.5	465	60.	145-2000	L	G	C	4-3¼	11¾	FP	Wa	Zen	M	DR	DR	dp.BL	Pe	Spi	Tim27452TW	Ros	Ws4IA	746	a	TD	192	117⅛	33	42x3	56x4	½
87	677	5.5	465	60.	145-2000	L	G	C	4-3¼	11¾	FP	Wa	Zen	M	DR	DR	dp.BL	Pe	Spi	Tim27452TW	Ros	Ws4IA	617	a	TD	207	115¾	33	42x3	56x3½	½
88	260	4.8	150	29.4	54-2100	L	G	S	7-2⅝	10 11/16	FP	No	Zen	V	DR	LN	P.Ow	Ow	Spi	Own 4D	Ha	L4IH	276	a	TX	.....	.....	34⅛	39x2¼	50x2½	N
89	240	4.6	150	26.3	*68-2800	L	G	C	4-2½	8 11/16	FP	Mo	Str	M	DR	DR	P.Lo	Ow	Spi	Own 4D	Ros	L4IHV	276	a	TX	98	60	34	39x2¼	50x2½	N
90	240	4.6	150	26.3	*68-2800	L	G	C	4-2½	8 11/16	FP	Mo	Str	M	DR	DR	P.Lo	Ow	Spi	Own 4D	Ros	L4IHV	276	a	TX	98	60	34	39x2¼	50x2½	N
91	289	4.3	170	25.6	45-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	DR	DR	P.Ow	Ow	MM	Own 4D	Ha	L4IH	276	a	TX	112	58¼	34⅝	39x2¼	50x2½	N
92	240	4.6	150	26.3	*68-2800	L	G	C	4-2½	8 11/16	FP	Mo	Str	M	DR	DR	P.Lo	Ow	Spi	Own 4D	Ros	L4IHV	276	a	TX	98	60	34	39x2¼	50x2½	N
93	240	4.6	150	26.3	*68-2800	L	G	C	4-2½	8 11/16	FP	Mo	Str	M	DR	DR	P.Lo	Ow	Spi	Own 4D	Ros	L4IHV	276	a	TX	98	60	34	39x2¼	50x2½	N
94	289	4.3	170	25.6	45-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	DR	DR	P.Ow	Ow	MM	Own 4D	Ha	L4IH	276	a	TX	112	58¼	34⅝	39x2¼	50x2½	N
95	299	5.5	202	33.7	77-2400	L	C	C	7-2⅝	10 11/16	FP	Ha	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 7D	Ha	L4IH	343	a	TX	115⅜	68 1/16	34⅝	41x2½	54x3	N
96	289	4.3	170	25.6	45-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 7D	Ha	L4IH	343	a	TX	115⅜	68 1/16	34⅝	41x2½	54x3	N
97	299	5.5	202	33.7	77-2400	L	C	C	7-2⅝	10 11/16	FP	Ha	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 7D	Ros	L4IHV	343	a	CX	115⅜	68 1/16	34⅝	41x2½	54x3	N
98	289	4.3	170	25.6	45-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 7D	Ha	L4IHV	343	a	TX	115¾	68 1/16	34⅝	41x2½	54x3	N
99	434	4.9	275	42.08	105-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 11D	Ros	LO4IHV	414	a	CI	107½	67½	34	41x2½	54x3	N
100	299	5.5	202	33.7	77-2400	L	C	C	7-2⅝	10 11/16	FP	Ha	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 7D	Ha	L4IH	343	a	TX	123¾	76¾	34	41x2½	54x3	N
101	326	4.3	207	28.9	54-1600	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	Ei	ns	P.Ow	Ow	Spi	Own 51A	Own	O2IM	335	a	CX	146	84¾	34	40½x2½	54¾x3	N
102	299	5.5	202	33.7	77-2400	L	C	S	7-2⅝	10 11/16	FP	Ha	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 11DC	Ros	LO4IHV	414	a	2I	140 11/16	84 11/16	34	41x2½	54x3	N
103	434	4.9	275	42.08	105-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 11D	Ros	LO4IHV	484	a	CI	107½	67½	34	41x2½	54x3½	N
104	299	5.5	202	33.7	77-2400	L	C	S	7-2⅝	10 11/16	FP	Ha	Zen	V	DR	DR	P.Ow	Ow	Spi	Own 11DC	Ros	LO4IHV	414	a	2I	150⅝	74¾	34	41x2½	54x3	N
105	434	4.9	275	42.0	105-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 9D	Ros	O4IHV	483	a	CI	160	100	34 1/16	42x3	56x3½	½
106	434	4.9	275	42.08	105-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 6D	Ros	O4IHV	553	a	CI	144⅞	84⅞	34 1/16	42x3	56x3½	½
107	434	4.9	275	42.0	105-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 9D	Ros	O4IHV	584	a	CI	160	100	34 1/16	42x3	56x3½	½
108	580	4.6	385	51.3	130-2100	H	C	S	7-3	15 11/16	FP	Ow	Zen	E	LN	LN	P.Ow	Ow	Spi	Own 6D	Ros	O4IA	553	a	CI	156¾	91¾	34 1/16	42x3	56x3½	½
109	580	4.6	385	51.3	130-2100	H	C	S	7-3	15 11/16	FP	Ow	Zen	E	LN	LN	P.Ow	Ow	Spi	Own 9D	Ros	O4IA	585	a	CI	172	107	34 1/16	42x3	56x3½	½
110	326	4.3	207	28.9	54-1600	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	Ei	ns	P.Ow	Ow	Spi	Own 2D	Own	OPXM	224	a	2I	148½	93½	34⅛	40½x3	56x3½	½
111	326	4.3	207	28.9	54-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	LN	LN	P.Ow	Ow	Spi	Own 9D	Ros	OPXM	224	a	2I	176	120	38½	42x3	57x5	N
112	326	4.3	207	28.9	54-1600	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	Ei	ns	P.Ow	Ow	Spi	Own 55	Own	OPXM	224	a	2I	167⅝	107⅛	42½	44x3	51⅞x5	N
113	434	4.9	275	42.08	105-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 9D	Ros	O4IA	585	a	CI	144⅞	84⅞	34 1/16	42x3	56x3½	½
114	434	4.9	275	42.0	105-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 9D	Ros	O4IA	585	a	CI	160	100	34 1/16	42x3	56x3½	½
115	434	4.9	275	42.08	105-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 9D	Ros	O4IA	585	a	2I	215	131½	34 1/16	42x3	56x3½	½
116	580	4.6	385	51.3	130-2100	H	C	S	7-3	15 11/16	FP	Ow	Zen	E	LN	LN	P.Ow	Ow	Spi	Own 9D	Ros	O4IA	585	a	CI	156¾	91¾	34 1/16	42x3	56x3½	½
117	580	4.6	385	51.3	130-2100	H	C	S	7-3	15 11/16	FP	Ow	Zen	E	LN	LN	P.Ow	Ow	Spi	Own 9D	Ros	O4IA	585	a	CI	172	107	34 1/16	42x3	56x3½	½
118	580	4.6	385	51.3	130-2100	H	C	S	7-3	15 11/16	FP	Ow	Zen	E	LN	LN	P.Ow	Ow	Spi	Own 9D	Ros	O4IA	616	a	CI	156¾	91¾	34 1/16	42x3	51⅞x5	N
119	326	4.3	207	28.9	54-1800	L	G	C	3-2¼	11⅜	FP	Ow	Zen	V	Ei	ns	P.Ow	Ow	Spi	Own 52	Own	OPXM	224	a	2I	167⅝	107⅛	42½	44x3	51⅞x5	N
120	580	4.6	385	51.3	130-2100	H	C	S	7-3	15 11/16	FP	Ow	Zen	E	LN	LN	P.Ow	Ow	Spi	Own 9D	Ros	O4IA	616	a	CI	156¾	91¾	34 1/16	42x3	51⅞x5	N
121	580	4.6	385	51.3	130-2300	H	C	S	7-3	15 11/16	FP	Ow	Zen	M	DR	LN	P.Ow	Ow	Spi	Own 5D	Ros	O4IA	616	a	TD	100	65	36	44x3	55⅝x5	N
122	134	5.1	100	15.6	48-3200	L	C	C	3-2 1/16	5 1/16	CC	No	Til	M	AL	AL	P.Ow	Fe	.....	Own 77	....	B4IM	134	P	4I	.....	.....	.....	30x1¾	46x1¾	N

Line Number	MAKE AND MODEL	Wheels Driven—6-Wheelers	GENERAL (See Keynote) Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight	Chassis Wt. (Stripped)	TIRE SIZE Front	Rear	MAJOR UNITS ENGINE Make and Model	No. of Cylinders Bore and Stroke	TRANSMISSION Make and Model	Location and Forward Speeds	Aux. Location and Speeds	REAR AXLE Make and Model	Gear and Type	Drive and Torque	GEAR RATIOS In High	In Low	FRAME Side Rail Dimensions	Type
	Four-Wheel-Drive																					
1	Coleman.......E52		2½	3800	120	144	12800	7200	B9.00/24	B9.00/24	Bud K393	6-4 3/16x4¾	Fu RU 16	U 4	A 2	Wis CR15	2F	H	Opt	Opt	10x2½x⅞	B
2	.......E53		3½	5300	130	180	18900	8000	B9.75/24	B9.75/24	Bud K428	6-4⅜x4¾	Fu MRU16	U 4	A 2	Wis CR26	2F	H	Opt	Opt	12x2½x⅞	B
3	.......E54		4-5	5600	130	180	20400	8800	B10.50/24	B10.50/24	Bud L468	6-4¼x5½	Fu MRU16	U 4	A 2	Wis CR30	2F	H	Opt	Opt	12x2½x1⅛	B
4	.......E55		5	6150	130	180	23000	9600	B11.25/24	B11.25/24	Bud L525	6-4½x5½	Fu MRU16	U 4	A 2	Wis CR30	2F	H	Opt	Opt	12x2½x1⅛	B
5	.......E55S		5-6	7200	144	180	24500	10600	B11.25/24	B11.25/24	Bud L525	6-4½x5½	Fu MHU16	U 4	A 2	Wis CR122	2F	H	Opt	Opt	12x2⅝x1¼	B
6	.......E56		6-7½	7800	144	180	29800	11600	B10.50/24	DB10.50/24	Bud GF6	6-4¾x6	Fu MHU	U 4	A 2	Wis CR122	2F	H	Opt	Opt	12x2⅝x1¼	B
7	.......E57		7½-10	9700	144	180	32000	12400	B11.25/24	DB11.25/24	Ste LT6	6-5¼x6	BL 714	U 4	A 2	Wis CR122	2F	H	Opt	Opt	16x3x1¼	B
8	Corbitt (3)...10FB6		1½-2	2300	Op	Op	....	4420	B6.50/20	DB6.50/20	Con 25A	6-3⅜x4	BL 214	U 4	A 2	Tim 53200H	SF	H	6.20	Opt	8⅞x3x3/16	T
9	....9FB6		2-2½	3200	Op	Op	....	5060	B7.00/20	DB7.00/20	Con 20C	6-3⅜x4⅝	BL 224	U 4	A 2	Tim 54200H	SF	H	6.80	Opt	8⅞x3x3/16	T
10	....12FB6		2½-3½	4000	Op	Op	....	5630	B7.50/20	DB7.50/20	Con E602	6-4⅛x4½	FuL 5A38	U 5	A 2	Tim 56200H	SF	H	7.40	Opt	9x3x¼	T
11	....12FD6		2½-3½	4300	Op	Op	....	5730	B7.50/20	DB7.50/20	Con E602	6-4⅛x4½	FuL 5A38	U 5	A 2	Wis 4916L	2F	H	7.36	Opt	9x3x¼	T
12	....15FD6		3-4	5700	Op	Op	....	8100	B8.25/20	DB8.25/20	Con 21R	6-4⅜x4¾	FuL 5A53	U 5	A 2	Wis 70000L	2F	H	8.00	Opt	9x3x¼	T
13	....18FD6		3½-5	6300	Op	Op	....	9200	B9.00/20	DB9.00/20	Con 22R	6-4½x5¼	FuL 5A53	U 5	A 2	Wis 1237H	2F	H	8.00	Opt	9x3x¼	T
14	FWD.......H4		1½-2	3325	120	160	11000	5300	P34x7	P34x7	Wis SU	4-4x5	Cot A	A 4	Op	Own H	BF	H	7.86	38.0	5 3/16x2¼x3/16	C
15	.......H6		2-2½	3385	133	180	13000	5900	P9.00/20	P9.00/20	Wau MS	6-3¾x4¾	BL 51	U 4	No	Own H	BF	H	8.92	47.7	5 3/16x2¼x3/16	C
16	.......HH-6		2½-3	4135	138	170	16000	6900	P9.75/20	P9.75/20	Wau MK	6-4⅛x4¾	BL 55	A 7	R 2	Own U	BF	H	6.95	84.7	5 3/16x2¼x3/16	C
17	.......B		3	4200	124	156	15500	6460	S36x6	S36x6	Own A	4-4¾x5½	Cot DAF	A 3	Op	Own B	BF	H	8.9	35.6	5 3/16x2¼x3/16	C
18	.......CU-6		3½-4	4985	147	179	19500	8000	B10.50/20	B10.50/20	Wau SRS	6-4½x5⅛	Own U	A 5	Op	Own U	BF	H	7.35	73.	7x3x11/32	C
19	.......CU6A		3½-4	4685	147	179	19000	7800	B10.50/20	B10.50/20	Wau SRS	6-4⅛x5⅛	BL 615	U 5	Op	Own U	BF	H	6.72	55.2	7x3x11/32	C
20	.......SSU		4-5	5135	147	179	22000	8300	B11.25/20	B11.25/20	Wau SRL	6-4⅜x5⅛	Own U	A 5	Op	Own U	BF	H	7.35	73.	7x3x11/32	C
21	.......SSUA		4-5	4835	147	179	21500	8100	B11.25/20	B11.25/20	Wau SRL	6-4⅜x5⅛	BL 706	U 5	Op	Own M	BF	H	7.35	73.	7x3x11/32	C
22	.......M5		5-7½	7400	165	195	29500	11200	B12.75/20	B12.75/20	Wau SRK	6-4⅝x5⅛	BL 714	U 4	A 2	Wis 131W	2F	H	10.0	207.	8x3x11/32	C
23	.......MF6		5-6	5785	147	179	24500	9100	B10.50/20	DB10.50/20	Wau SRK	6-4⅝x5⅛	Own U	A 5	Op	Own M	BF	H	7.35	73.0	8x3x11/32	C
24	(Fr't.-Wh.-Dr.) LBU		5-6	4800	171	Op	23500	9000	B9.00/20	DB9.00/20	Wau SRS	6-4½x5⅛	BL 55	U 4	Op	Own U	D	H	7.35	39.5	7x3x11/32	C
25	.......M7		7½-10	8500	165	195	37000	12400	P40x10	DP40x10	Wau RB	6-5x5¾	BL 714	U 4	A 2	Wis 131W	2F	H	8.36	173.	10x3x11/32	C
26	.......(T)60-T		20-25	6300	134	Op	60000	10000	B10.50/20	DB10.50/20	Wau 125	6-4⅝x5⅛	Own U	A 5	Op	Own M	BF	H	7.35	73	7x3x11/32	C
27	.......(T)72-T		25-30	7000	120	Op	72000	10450	B9.75/20	DB9.75/20	Wau 125	6-4⅝x5⅛	BL 724	U 4	No	Wis 1237	2F	H	6.7	47.4	8x3x¼	C
28	Indiana.......12X4		1½	2650	141	...	10000	4350	B6.50/20	DB6.50/20	Her JXC	6-3¾x4¼	BL	U 4	A 2	Tim 53200H	SF	H	5.14	54.0	7 3/16x2½x3/16	C
29	.......14X4		2½	3950	141	...	14000	5900	B7.50/20	DB7.50/20	Her WXB	6-3¾x4½	BL	U 4	U 2	Wis	SF	H	5.40	50.0	7 3/16x2½x3/16	C
30	.......16X4		3	4850	156	...	16000	7500	B8.25/20	DB8.25/20	Her WXC2	6-4⅛x4½	BL	U 4	U 2	Wis	2F	H	6.06	89.0	8x3x¼	C
31	.......18X4		3½	5850	160	...	21000	9000	B9.00/20	DB9.00/20	Her YXC	6-4⅜x4¾	BL	U 4	A 2	Wis	2F	H	7.83	110.	8⅛x3x3/16	C
32	.......18x4A		3½	5400	160	224	21000	8700	B9.00/20	D9.00/20	Her YXC3	6-4⅝x4¾	BL	U4	A 2	Tim	SF	H	6.14	38.6	8⅛x3x¼	T
33	.......20X4		4½	7200	188	...	24000	10600	B9.75/20	DB9.75/20	Her HXB	6-5x6	BL	U 4	A 2	Wis	2F	H	8.00	128.	9x3x¼	C
34	.......22X4		5	10000	200	...	31000	14000	B10.50/20	DB10.50/20	Her HXC	6-5¼x6	BL	U 4	A 2	Wis	2F	H	9.11	86.0	8¼x3 3/16x5/16	C
35	Le Moon (c.o.e.) 1100		5	***	94	145	....	9300	B9.75/20	DB9.75/20	Wau 6RB	6-5x5¾	BL 7341	U 4	No	Tim 66725W	WF	H	8.2	51.4	9x4x¼	C
36	Mar.-Herr.......A10		1½-2	2350	135	155	....	4650	B6.50/20	DB6.50/20	Her JXA	6-3⅜x4¼	WG T9	U 4	A 2	Own-Tim	BF	H	6.60	82.0	7⅞x2½x3/16	C
37	.......A20		2½-3	3250	135	155	....	5150	B7.50/20	DB7.50/20	Her JXC	6-3¾x4¼	Cla R103	U 5	A 2	Own-Tim	BF	H	5.83	80.0	7⅞x2½x3/16	C
38	.......A30		3½-4	4300	155	167	....	7000	B8.25/20	DB8.25/20	Her WXC	6-4x4½	Fu 5A380	U 5	A 2	Own-Tim	BF	H	6.17	116.	9⅞x3x3/16	C
39	.......A40		4-4½	4800	155	167	....	7500	B9.00/20	DB9.00/20	Her WXC3	6-4¼x4½	Fu 5A380	U 5	A 2	Own-Tim	BF	H	7.80	133.	9⅞x3x3/16	C
40	.......A50		4-4½	5700	155	167	....	8150	B9.00/20	DB9.00/20	Her WXC3	6-4¼x4½	Fu 5A380	U 5	A 2	Own-Wis	2F	H	8.0	136.	9⅞x3x3/16	C
41	.......TH300		4½	6150	163	193	....	8985	B9.75/20	DB9.75/20	Her YXC	6-4⅜x4¾	Fu 5A380	U 5	A 2	Own-Wis	2F	H	8.0	143.	8⅛x3x3/16	P
42	.......TH310		5-5½	7150	163	193	....	9620	B9.75/20	DB9.75/20	Her YXC3	6-4⅝x4¾	Fu 5A530	U 5	A 2	Own-Wis	2F	H	8.0	143.	8⅛x3x3/16	P
43	.......TH310A		6	8050	163	193	....	10120	B9.75/22	DB9.75/22	Her RXC	6-4⅝x5¼	Fu 5A530	U 5	A	Own-Wis	2F	H	7.79	140.	8⅛x3x3/16	P
44	.......(13) TH315		7	9350	198	216	....	10950	B10.50/20	DB10.50/20	Her HXB	6-5x6	BL 724	U 4	A 3	Own-Wis	2F	H	7.79	140.	8⅛x3x3/16	P
45	.......(13) TH320		8-9	11500	198	228	....	14200	B10.50/24	DB10.50/24	Her HXC	6-5¼x6	BL 724	U 4	A 3	Own-Wis	2F	H	8.05	166.	10x3x⅜	P
46	Oshkosh.......JSW		1½-2	2650	123	Op	10660	4880	B7.00/20	DB7.00/20	Her WXC	6-4x4½	BL 224	U 4	No	Own JSB	SF	H	6.19	40.1	6x3½x¼	T
47	.......JSB		1½-2	2490	149	Op	10750	4760	B7.00/20	DB7.00/20	Her JXC	6-3¾x4¼	BL 51-4	U 4	No	Own JSB	SF	H	6.19	40.1	6x3½x¼	T
48	.......LB		2-2½	4375	146	165	13900	6700	B9.00/20	B9.00/20	Her JXC	6-3¾x4¼	BL 51-4	U 4	No	Own LB	2F	H	7.3	39.0	7x3x¼	T
49	LC		2½-3	4575	146	165	15150	6950	B9.00/20	B9.00/20	Her WXC	6-4x4½	Fu 5A380	U 5	No	Own LC	2F	H	7.3	53.1	7x3x¼	T
50	.......B3S		3½-4	4960	146	165	19475	8175	B10.50/20	B10.50/20	Her WXC3	6-4¼x4½	Fu 5A380	U 5	A 2	Own B3S	SF	H	6.10	86.2	7x3x½	L
51	.......B3D		3½x4	5390	146	165	19700	8400	B10.50/20	B10.50/20	Her WXB3	6-4¼x4½	Fu 5A380	U 5	A 2	Own B3D	2F	H	7.00	98.0	7x3x½	L
52	.......C3S		4-5	5150	148	165	21850	8350	B11.25/20	B11.25/20	Her YXC2	6-4½x4¾	Fu 5A530	U 5	A 2	Own C3S	SF	H	6.10	86.8	7x3x½	L
53	.......C3D		4-5	5795	146	165	22200	8700	B11.25/20	B11.25/20	Her YXC2	6-4½x4¾	Fu 5A530	U 5	A 2	Own C3D	2F	H	6.40	90.2	7x3x½	L
54	.......FC		5	5990	146	165	22725	9225	B11.25/20	B11.25/20	Her RXB	6-4½x5¼	Fu 5A530	U 5	No	Own FC	2F	H	7.60	67.6	7x3x½	L
55	.......FB		5-6	6350	146	165	25000	9500	B11.25/20	B11.25/20	Her RXC	6-4⅝x5¼	Fu 5A530	U 5	A 2	Own FB	2F	H	7.60	106.	7x3x½	L
56	.......FD		6-7½	7350	146	165	30000	11500	B10.50/20	DB10.50/20	Her RXC	6-4⅝x5¼	Fu 5A530	U 5	A 2	Own FD	2F	H	7.20	101.	8x3x½	L
57	.......BG3		7½-10	8500	165	175	37000	13200	P40x10	DP40x10	Her GXB	6-5x5¾	BL 734	U 4	A 3	Own BG3	2F	H	6.20	101.	10x3¼x½	L
58	.......GD		10	9800	165	175	38000	14200	B13.50/20	B13.50/20	Her HXD	6-5½x6	BL 734	U 4	A 3	Own GD	2F	H	6.10	99.3	10x3¼x½	L
59	Walter.......FN		2½-3½	4500	120	144	16000	6500	B9.00/20	B9.00/20	Own 6MK	6-4⅛x4¾	Own FN	U 5	No	Own FN	2D	H	7.0	70.0	7x2¾x¼	P
60	.......FM		3½-5	5500	120	144	20000	7500	B9.00/20	DB9.00/20	Own 6SRL	6-4⅜x5⅛	Own FM	U 5	No	Own FM	2D	H	6.0	60.0	12x2¾x¼	P
61	.......FCKD		5-6	6600	124	136	25000	9000	B9.75/24	DB9.75/24	Own SRK	6-4⅝x5⅛	Own FK	U 5	No	Own FK	2D	H	8.5	85.0	11x3x¼	P
62	.......FCS		5-7	7200	136	160	27000	9500	B9.75/24	DB9.75/24	Own 6SRK	6-4⅝x5⅛	Own FK	U 5	No	Own FH	2D	H	8.5	85.0	13x3x¼	P
63	.......FBS		5-7	7900	136	160	27000	9500	B9.75/24	DB9.75/24	Own 6RB	6-5x5¾	Own FH	U 5	No	Own FH	2D	H	8.5	85.0	13x3x¼	P
64	.......FBRS		7-9	8300	136	160	32000	10500	B10.50/24	DB10.50/24	Own 6RB	6-5x5¾	Own FH	U 5	No	Own FHR	2D	H	8.5	85.0	13x3x¼	P
	Six-Wheelers																					
65	B'kway 180SBT	2C	5-7½	4200	212	224	28000	9795	B8.25/20	BD8.25/20	Con 32B	6-4¼x4½	Fu 5A38	U 5	Op	Tim SBT-251	SF	T	6.14	48.5	8¼x3x⅜	B
66	Corbitt...16SFD	6	2-3	5500	Op	Op	....	5110	B6.50/20	DB6.50/20	Con E602	6-4⅛x4½	Fu 5A38	U 5	A 2	Tim SD75H	2F	R	7.36	Opt	7x3x¼	T
67	(3)..16SFD8	6	2½-4	5900	Op	Op	....	7040	B7.00/20	DB7.00/20	Lyc AEF	8-3¼x4½	Fu 5A53	U 5	A 2	Tim SD75W	2F	R	7.36	Opt	8x3x¼	T
68	.......20SW6	4R	3-5	5720	Op	Op	....	9000	B7.50/20	DB7.50/20	Con 20R	6-4⅛x4¾	BL 615	U 5	No	Tim SW151TW	w/2F	R	Opt	Opt	8x3x¼	C
69	.......28SW6	4R	5-7½	6380	Op	Op	....	10000	P34x7	DP34x7	Con 21R	6-4⅜x4¾	BL 607	A 7	No	Tim SW251TW	w/2F	R	Opt	Opt	8x3x¼	T
70	.......28SFD6	6	5-7½	8900	Op	Op	....	11700	B8.25/20	DB8.25/20	Con 22R	6-4½x5¼	Fu 5A53	U 5	A 2	Tim SD251W	2F	R	8.44	Opt	9x3x¼	T
71	.......36SW6	4R	7½-10	8800	Op	Op	....	11700	P36x8	DP36x8	Con 21R	6-4⅜x4¾	BL 607	A 7	No	TimSW310W	w/2F	R	Opt	Opt	10⅝x3x5/16	T
72	.......36SFD6	6	7½-10	12300	Op	Op	....	14600	B9.00/22	DB9.00/22	Her HXB	6-5x6	BL 707	U 4	A 3	Tim SD320W	2F	R	8.15	Opt	10⅝x3x5/16	T
73	.......40SW6	4R	10-15	11000	Op	Op	....	13000	P38x9	DP38x9	Con 16H	6-4¾x5¾	BL 707	A 7	No	TimSW420W	w/2F	R	Opt	Opt	10⅝x3x5/16	T
74	.......45SFD6	6	10-15	16900	Op	Op	....	15400	B9.75/22	DB9.75/22	Her HXC	6-5¼x6	BL 734	U 4	A 3	Tim SD420W	2F	R	8.15	Opt	10⅝x3x5/16	T
75	Day Elder..150		3	1645	159	189	15000	5400	B6.50/20	DB6.50/20	Her JXB	6-3⅝x4¼	WG T9	U 4	No	Tim SBT75	BF	H	5.66	36.2	7x3¾x¼	C
76	285	4R	8	5295	205	234	29500	12000	B8.25/20	DB8.25/20	Her RXC	6-4⅝x5¼	BL 534	U 4	No	Ti SWD210H	WF	R	7.50	47.6	10x3¾x3/16	C
77	345	4R	10	6395	205	234	34500	12500	B9.00/20	DB9.00/20	Her RXC	6-4⅝x5¼	BL 534	U 4	No	TiSWD310W	WF	R	8.50	54.0	10x3¾x3/16	C
78	402	4R	12	7495	205	234	40200	14200	B9.75/20	DB9.75/20	Her RXC	6-4⅝x5¼	BL 725	U 5	No	TiSWD410W	WF	R	9.0	63.6	10x3¾x3/16	C
79	Diamond T.801	4R	4	4140	189	219	21000	8500	P36x8	P36x8	Her YXC	6-4⅜x4¾	BL 55	A 7	No	Own	WF	H	Opt	Opt	6½x3x¼	P
80	1201	4R	6	5600	180	210	28000	11000	P34x7	DP34x7	Her RXB	6-4½x5¼	BL 60	A 7	No	Tim SW200	WF	R	Opt	Opt	9x3½x¼	P
81	1602	4R	8	6400	175	210	36000	11700	P36x8	DP36x8	Her RXC	6-4⅝x5¼	BL 60	A 7	No	Tim SW320	WF	R	Opt	Opt	9x3½x¼	P
82	1603	4R	8	7500	184	224	36000	12500	P36x8	DP36x8	Wau 6RB	6-5x5¾	BL 70	A 7	No	Tim SW320	WF	R	Opt	Opt	9x3½x¼	P
83	Dodge....GS50	2C	1½-4	935	153	153	12000	3650	B6.00/20	P32x6	Own	6-3¼x4¼	Own	U 4	No	Own	SF	H	5.85	36.1	7 3/16x2⅝x11/32	C
84	Bros....FS75	2C	3-9	3995	221	221	30000	8350	B9.00/20	DB9.00/20	Own	6-3⅝x5	Own	U 4	No	Own	SF	H	7.13	48.2	10x3¼x3/16	C
85	Fageol..8-46HP	4R	8	7800	195	220	40500	13500	B9.75/20	DB9.75/20	Wau 6-125	6-4⅝x5⅛	BL 734	U 4	A 3	Tim Own	WF	R	5.7	120.	8x3½x3/16	C
86	.......8-46AL	4R	8	8800	195	220	40500	11400	B9.75/20	DB9.75/20	Wau 6-125	6-4⅝x5⅛	BL 734	U 4	A 3	Tim Own	WF	R	5.7	120.	15x4x⅜	T
87	.......10-46RB	4R	10	9000	232	232	56000	14700	B9.75/20	DB9.75/20	Wau 6RB	6-5x5¾	BL 734	U 4	A 3	Tim Own	WF	R	6.2	135.	8⅛x4x⅜	C
88	.......10-46AL	4R	10	10000	232	232	56000	12600	B9.75/20	DB9.75/20	Wau 6RB	6-5x5¾	BL 734	U 4	A 3	Tim Own	WF	R	6.2	135.	15x4x⅜	T
89	Federal.......22	4R	3	1720	172	198	15000	5000	B6.00/20	DB6.00/20	Her JXB	6-3⅝x4¼	WG T9	U 4	No	Cla B412	SF	R	6.38	40.8	8½x2⅞x5/32	TL
90	21	2R	3	1470	172	198	15000	4800	B6.00/20	DB6.00/20	Her JXB	6-3⅝x4¼	WG T9	U 4	No	Cla B412	SF	R	6.38	40.8	8½x2⅞x5/32	TL
91	36	2R	4½	2975	192	218	24000	7700	B7.50/20	DB7.50/20	Wau 6MK	6-4⅛x4¾	Cla R908	U 5	No	Cla B642	SF	H	7.16	58.2	10x3½x¼	TL
92	37	4R	4½	3350	192	218	24000	8100	B7.50/20	DB7.50/20	Wau 6MK	6-4⅛x4¾	Cla R908	U 5	No	Cla B642	SF	H	7.16	58.2	10x3½x¼	TL
93	.......T10SW	2R	7	3895	188	224	28000	9550	P34x7	DP34x7	Con 20R	6-4⅛x4¾	Cla B710	A 5	No	Tim 58200H	SF	H	7.8	50.6	7½x3½x¼	B
94	FWD.....MX6	6	10-15	12255	200	Op	48000	17800	B13.50/20	B13.50/20	Wau RB	6-5x5¾	BL 714	U 4	A 2	Wis 131TW	2F	H	8.36	173.	10x3x11/32	C
95	.......X6	4F	6-10	7385	170	Op	36000	12000	B9.75/20	DB9.75/20	Wau SRK	6-4⅝x5⅛	Own U	A 5	Op	Own X	BF	H	7.35	73	7x3x11/32	C
96	(6)Gen.Mo.T95	4R	9-11	7695	189	224	40000	13250	P34x7	DP34x7	Own 525	6-4½x5½	Own	U [illegible]	Op	Own	WF	R	8.50	53.3	9 3/16x4x3/16	L
97	.......T130	4R	12-15	9490	189	224	50000	14545	B9.75/20	DB9.75/20	Own 616	6-4⅞x5½	Own	U 4	A 3	Own	WF	R	9.50	119.	9 3/16x4x⅜	L
98	Hendrick'n.21D	4R	2-6	3500	Op	Op	21000	6800	B7.50/20	DB7.50/20	Wau 6-90	6-3⅜x4¾	Fu 5A38	U 5	No	Own 985	SF	H	Opt	Opt	8x3x3/16	C
99	.......25D	4R	3-8	3900	Op	Op	25000	8000	B8.25/20	DB8.25/20	Wau 6-110	6-4x4¾	Fu 5A38	U 5	No	Own 985	SF	H	Opt	Opt	8x3x3/16	C
100	.......32D	4R	4-9	4900	Op	Op	32000	10500	B9.00/20	DB9.00/20	Wau 6-110	6-4x4¾	Fu 5A38	U 5	No	Own 2513X	SF	R	Opt	Opt	8x3x3/16	P
101	.......38D	4R	5-12	6600	Op	Op	38000	11200	B9.75/20	DB9.75/20	Wau 6-125	6-4⅜x5⅛	Fu 5A53	U 5	No	Own 2513X	SF	R	Opt	Opt	8x3x3/16	P
102	.......40D	4R	12	8000	Op	Op	40000	13200	B9.75/20	DB9.75/20	Wau 6-125	6-4⅜x5⅛	Fu 5A53	U 5	No	Eat 44000	2F	R	Opt	Opt	8x3x3/16	P
103	.......44D	4R	12	9000	Op	Op	44000	14000	B9.75/20	DB9.75/20	Wau 6RB	6-5x5¾	BL 70-7	A 7	No	Eat 44000	2F	R	Opt	Opt	8x3x3/16	P
104	Hug.......99	4R	10	10300	148	148	58500	15100	S36x8	S40x16	Bud GF6	6-4¾x6	BL 714-703	U 4	A 3	Wis SD420AW	2F	R	10.3	139.	9x4 3/16x11/32	I
105	Ind..95SBT-151	2C	3	1875	168	186	20000	6125	P32x6	DP32x6	Her JXC	6-3¾x4¼	BL 224	U 4	No	Tim SBT151	SF	T	7.4	45.8	7 3/16x2¾x3/16	T
106	.....95SW 75	4R	3	1900	168	186	20000	5800	P32x6	DP32x6	Her JXC	6-3¾x4¼	BL 224	U 4	No	Tim SW75	WF	T	7.4	45.8	7 3/16x2¾x3/16	T
107	..17ASW151	4R	3	3450	188	212	24000	7500	B8.25/20	DB8.25/20	Her WXC	6-4x4½	BL 3341	U 4	Op	Tim SW151	WF	T	6.4	403.	8⅛x3x3/16	T
108	...17SBT251	2C	4	3500	188	224	28000	8850	P34x7	DP34x7	Her YXC	6-4⅜x4¾	BL 524	U 4	Op	Tim SBT251	SF	T	6.1	37.8	8⅛x3x3/16	TL
109	...17SW251	4R	4	3900	188	224	28000	9500	P34x7	DP34x7	Her YXC	6-4⅜x4¾	BL 524	U 4	Op	Tim SW251	WF	T	6.2	38.1	8⅛x3x3/16	TL
110	.......16X6	6	3	5650	170	...	20000	8000	B7.00/20	DB7.00/20	Her RXB	6-4½x5¼	BL 5351	U 4	U 2	Wis	2F	H	4.66	30.8	8x3x¼	C
111	.......18X6	6	3½	6650	170	...	28000	10500	B8.25/20	DB8.25/20	Her RXC	6-4⅝x5¼	BL	U 4	A 2	Wis	2F	H	7.83	110.	8⅛x3x3/16	C
112	.......20X6	6	4½	8950	188	...	36000	14000	B9.00/20	DB9.00/20	Her HXC	6-5¼x6	BL	U 4	A 2	Wis	2F	R	8.95	84.0	9x3x¼	C
113	.......22X6	6	5	12100	200	...	40000	16000	B9.75/20	DB9.75/20	Her HXD	6-5½x6	BL	U 4	A 2	Wis	2F	R	9.11	86.0	8¼x3 3/16x5/16	C

Line Number	Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	Main Bearings: Number and Diameter	Main Bearings: Length	Oiling System Type	Governor Make	Fuel Syst.: Carburetors Make	Fuel Syst.: Fuel Feed	Electrical: Ignition System Make	Electrical: Generator, Starter Make	Clutch Type and Make	Radiator Make	Universals Make	Front Axle: Make and Model	Steering Gear Make	Brakes, Service: Make, Location, Operation	Brakes, Service: Lining Area	Brakes, Service: Drum Material	Brakes: Hand Location, Type	Body Mounting Data: Cab to Rear of Frame	Body Mounting Data: Cab to Rear Axle	Body Mounting Data: Width of Frame	Springs: Front	Springs: Rear	Springs: Auxiliary Type
1	393	4.9	260	42.0	103-2600	L	G	C	7-3	11½	FP	Ha	Zen	P	DR	DR	D.Fu	Pe	Spi	Wis CF15	Ros	W2/4IM	476	p	TD	108	78	30	48x3	48x3	C
2	428	4.7	280	45.9	107-2600	L	G	C	7-3	11½	FP	Ha	Zen	P	DR	DR	D.Fu	Pe	Spi	Wis CF25	Ros	W2/4IM	476	p	TD	144	89	30	48x3	48x3	C
3	468	4.8	295	43.4	108-2200	L	G	C	7-3	11½	FP	Ha	Zen	P	DR	DR	D.Fu	Pe	Spi	Wis CF30	Ros	W2/4IM	476	p	TD	144	89	30	48x3	48x3	C
4	525	4.9	336	48.2	114-2200	L	G	C	7-3	11½	FP	Ha	Zen	P	DR	DR	D.Fu	Pe	Spi	Wis CF30	Ros	W2/4IM	476	p	TD	144	89	30	48x3	48x3	C
5	525	4.9	336	48.2	114-2200	L	G	C	7-3	11½	FP	Ha	Zen	P	DR	DR	D.Fu	Pe	Spi	Wis CF122	Ros	W2/4IM	530	G	TD	168	105	30	48x3½	52x3½	C
6	638	4.3	410	54.1	126-1850	L	G	C	4-3	10 1/16	FP	Bu	Str	P	DR	DR	D.Fu	Pe	Spi	Wis CF122	Ros	W2/4IM	530	G	TD	168	105	30	48x3½	52x3½	C
7	779	4.3	475	66.1	170-1800	L	G	A	7-3	13½	FP	St	Zen	P	NE	NE	dp.BL	Pe	Spi	Wis CF122	Ros	O2/4IA	530	G	TD	Opt	105	30	48x3½	52x3½	C
8	214	4.9	142	27.3	72-3200	L	C	A	4-2⅜	6⅜	FP	Opt	Zen	M	DR	DR	P.BL	Pe	Spi	Wis F30B-1	Ros	L4IH	327	a	TX	Opt	Opt	34	40x2½	50x2½	½
9	248	5.0	160	27.3	78-3200	L	C	A	7-2⅜	10 1/16	FP	Opt	Zen	M	DR	DR	P.BL	Pe	Spi	Wis F54B	Ros	L4IH	327	a	TX	Opt	Opt	34	40x2½	54x3	½
10	360	4.4	240	40.8	90-2500	L	C	C	7-2⅝	11 11/16	FP	Opt	Zen	M	DR	DR	P.Li	Pe	Spi	Wis F56B	Ros	L4IH	345	a	TX	Opt	Opt	34	40x2½	54x3	½
11	360	4.4	240	40.8	90-2500	L	C	C	7-2⅝	11 11/16	FP	Opt	Zen	M	DR	DR	P.Li	Pe	Spi	Wis F-75AB	Ros	L4IH	345	a	TX	Opt	Opt	34	40x2½	54x3	½
12	428	4.6	308	45.9	118-2600	H	C	A	7-2¾	13	FP	Opt	Zen	M	DR	DR	P.Li	Pe	Spi	Wis F211	Ros	L4IHV	660	a	TD	Opt	Opt	34	40x2½	54x3	½
13	500	4.5	340	48.6	138-2500	H	C	A	7-2¾	13 1/16	FP	Opt	Zen	M	DR	DR	P.Li	Pe	Spi	Wis F311	Ros	L4IHV	768	a	TD	Opt	Opt	34	46x3	54x3	½
14	251	4.5	160	25.6	50-2000	H	G	C	3-2 1/16 r	8	PC	No	Zen	V	AL	AL	D.DG	Pe	Blo	Own H	Ros	OT/4XM	238	G	2I	112	81	36	42¾x2½	52¾x2½	½
15	315	4.5	200	33.7	72-2500	L	G	C	7-2⅝	12⅜	PC	Wa	Zen	V	NE	NE	D.BL	Pe	Blo	Own H	Ros	OT/4XM	252	G	2I	115½	81½	36	42¾x2½	52¾x2½	½
16	381	4.5	240	40.8	85-2400	L	G	C	7-2⅝	12⅜	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own U	Ros	OT/4XM	238	G	2I	126	86	36	42¾x2½	52¾x2½	½
17	398	4.0	210	36.1	56-1350	T	G	C	3-2	12	PC	Pe	Str	G	NE	NE	O.ME	Mc	Blo	Own B	Ros	OT/4XM	238	G	2I	130	93	36	42¾x2½	52¾x2½	N
18	411	4.6	265	40.8	91-2300	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	O.HS	Pe	Blo	Own U	Ros	OT/4XM	238	G	2I	132	93	36	42¾x2½	52¾x2½	N
19	411	4.6	265	40.8	91-2300	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own U	Ha	OT/4XM	238	G	4X	132	93	36	42¾x2½	52¾x2½	½
20	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	PC	Wa	Zen	V	NE	NE	O.HS	Pe	Blo	Own M	Ros	OT/4XM	238	G	2I	132	93	36	42¾x2½	52¾x2½	½
21	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own M	Ha	OT/4XM	238	G	2I	132	93	36	42¾x2½	52¾x2½	N
22	517	4.6	330	51.3	110-2300	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Wis 131F	Ros	B4IMV	324	G	T4	153½	110½	34	48x3½	52x4	½
23	517	4.6	330	51.3	110-2300	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own M	Ros	O4TB	722	G	4X	132	93	36	42¾x2½	54¾x2½	½
24	411	4.6	265	40.8	91-2300	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own U	Ros	O4IM	722	G	4D	Opt	Opt	42	42¾x2½	52x4	N
25	677	4.4	460	60.	145-2000	L	G	H	4-3½	11⅜	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Wis 131F	Ros	B4IMV	324	G	T4	153½	110½	34	48x3½	52x4	N
26	462	5.2	330	45.9	125-2500	F	G	H	7-3	13⅞	PC	Wa	Zen	P	NE	NE	O ME	Pe	Blo	Own U	Ros	O4A	610	G	T4	107	80	34	42¾x2½	52¾x2½	N
27	462	5.2	330	45.9	125-2500	F	G	H	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Wis 1237	Ros	4A	610	G	T4	97¼	67¼	34	48x3½	52x3½	N
28	282	5.4	176	33.8	73-2800	L	G	A	7-2⅝	10 11/16	PC	Opt	Str	M	AL	AL	P.BL	Yo	Spi	Wis	Ros	L4IH	...	G	CD	92	56	34	37x2¼	54x2½	N
29	298	4.7	190	33.7	70-2600	L	G	A	7-2⅝	13¼	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Wis	Ros	L4IH	...	G	CD	92	56	34	37x2¼	54x2½	N
30	361	4.7	235	38.4	82-2400	L	G	A	7-2⅝	13¼	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Wis	Ros	L4IHV	...	G	CD	108	73¼	34	39½x2½	54x3	N
31	428	4.5	283	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Wis	Ros	L4IHV	...	G	CD	120	72	34	44x3	50x4	N
32	478	4.4	315	51.3	104-2200	L	G	A	7-3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	SPC	Tim	Ros	L4IHV	918	G	CD	120	72	34	44x3	50x4	N
33	707	4.5	455	60.	148-2000	L	G	A	7-3½	17½	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Wis	Ros	L4IHV	...	G	CD	144	88	34	44x3	50x4	N
34	779	4.5	505	66.2	163-2000	L	G	A	7-3½	17½	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Wis	Ros	Ws4IA	...	G	CD	168	100	34	44x3	50x4	N
35	677	4.6	460	60.	127-2000	L	G	A	4-3½	11¾	PC	Wa	Str	M	My	LN	D.BL	Ch	Spi	Tim26045TW	Ros	Ws4IA	876	a	TD	81	49½	34	48x3½	54x3½	½
36	228	4.7	156	27.3	63-2800	L	G	C	7-2½	10 11/16	PC	No	Zen	M	DR	DR	P.BB	Yo	Spi	TWH	Ros	L4IH	267	a	FX	88	52	34	42x2½	50x2½	½
37	282	5.3	193	33.7	73-2800	L	G	C	7-2½	10 11/16	PC	No	Zen	M	DR	DR	P.BB	Yo	Spi	TWH	Ros	L4IH	281	a	FD	88	52	34	42x2½	50x2½	½
38	339	5.0	235	38.4	94-2800	L	G	A	7-2⅝	13¼	PC	No	Zen	M	DR	DR	P.BB	Yo	Spi	TWH	Ros	L4IHV	342	a	FD	119	72	34	44x3	52x3	½
39	383	5.0	265	43.3	106-2800	L	G	A	7-2⅝	13¼	PC	No	Zen	M	DR	DR	P.BB	Yo	Blo	TWH	Ros	L4IHV	384	a	FD	119	72	43	44x3	52x3	½
40	383	5.0	265	43.3	106-2800	L	G	A	7-2⅝	13¼	PC	Ha	Zen	M	DR	DR	P.BB	Yo	Blo	Own-Wis	Ros	W2/4IA	328	a	FD	119	72	34	44x3	52x3	½
41	428	4.4	280	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Zen	M	DR	DR	D.Fu	Yo	Blo	Own-Wis	Ros	W2/4IA	328	a	FD	109	72	34	44x3	52x3½	½
42	478	4.4	320	51.3	104-2200	L	G	A	7-3	14	PC	Ha	Zen	M	DR	DR	D.Fu	Yo	Blo	Own-Wis	Ros	W2/4IA	410	a	FD	109	72	34	44x3	52x3½	½
43	529	4.9	350	51.3	114-2200	L	G	A	7-3	14	PC	Ha	Zen	M	DR	DR	D.Fu	Yo	Blo	Own-Wis	Ros	W2/4IA	380	a	FD	109	72	34	44x3	52x3½	½
44	707	4.5	460	60.0	148-2000	L	G	A	7-3½	17	PC	Ha	Zen	M	DR	DR	dp.BL	Yo	Blo	Own-Wis	Ros	Ws2/4IA	380	a	FD	168	102	34	52x4	54x4	½
45	779	4.5	508	66.2	164-2000	L	G	A	7-3½	17	PC	Ha	Zen	M	DR	DR	dp.BL	Yo	Blo	Own-Wis	Ros	Ws2/4IA	380	a	2FD	140	102	34	52x4	54x4	½
46	339	4.7	225	38.4	75-2200	L	G	C	7-2½	13¼	PC	No	Zen	M	AL	AL	P.BL	Ow	Spi	Own JSB	Ha	B4IMV	304	G	TX	77½	51	34	42x2½	44x2½	½
47	282	5.3	176	33.7	72-2800	L	G	C	7-2½	10 11/16	PC	No	Zen	M	AL	AL	P.BL	Ow	Spi	Own JSB	Ha	B4IMV	304	G	TX	103½	77	34	42x2½	44x2½	½
48	282	5.3	176	33.7	72-2500	L	G	C	7-2½	10 11/16	PC	Ha	Str	M	RB	LN	D.BL	Mo	Blo	Own LB	Ros	O4XM	142	C	2I	112¼	82	34	44x2½	50x3	N
49	339	4.7	210	38.4	70-2000	L	G	C	7-2⅝	13¼	PC	Ha	Str	M	RB	LN	D.BL	Mo	Blo	Own LC	Ros	O4XM	142	G	2I	112¼	82	34	44x2½	50x3	½
50	383	4.7	265	43.3	91-2000	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	LN	RB	P.BB	Ch	Blo	Own B3S	Ros	B4IMV	518	G	TX	112¼	82	34	44x2½	50x3	½
51	383	4.7	265	43.3	91-2000	L	G	C	7-2⅝	13¼	PC	Ha	Zen	M	LN	RB	P.BB	Ch	Blo	Own B3D	Ros	B4IMV	518	G	TX	112¼	82	34	44x2½	50x3	½
52	453	4.4	297	48.6	95-2000	L	G	C	7-3	15	PC	Ha	Zen	M	LN	RB	P.BB	Ch	Blo	Own C3S	Ros	B4IMV	518	G	TX	112¼	82	34	44x2½	50x3	½
53	453	4.4	297	48.6	95-2000	L	G	C	7-3	15	PC	Ha	Zen	M	LN	RB	P.BB	Ch	Blo	Own C3D	Ros	B4IMV	518	G	TX	112¼	82	34	44x2½	50x3	½
54	500	4.9	330	48.6	106-2000	L	G	A	7-3	12½	PC	Ha	Zen	M	LN	RB	P.BB	Ch	Blo	Own FC	Ros	B4IMV	666	G	TX	112¼	82	34	44x2½	50x3	½
55	529	4.9	350	51.3	112-2000	L	G	A	7-3	12½	PC	Ha	Zen	M	LN	RB	P.BB	Ch	Blo	Own FB	Ros	B4IMV	666	G	TX	112¼	82	34	44x2½	50x3	½
56	529	4.9	350	51.3	112-2000	L	G	A	7-3	12½	PC	Ha	Zen	M	LN	RB	P.BB	Ch	Blo	Own FD	Ros	B4IMV	666	G	TX	112¼	82	34	44x3	50x4	½
57	677	4.5	440	60.0	142-2000	L	G	A	7-3½	17	PC	Ha	Zen	M	LN	LN	dp.BL	Ch	Blo	Own BG3	Ros	B4IMV	666	G	FD	119	85	36	48x3½	52x4	½
58	855	4.5	555	72.8	180-2000	L	G	A	7-3½	17	PC	Ha	Zen	M	LN	LN	dp.BL	Ch	Blo	Own GD	Ros	B4IMV	666	G	FD	119	85	36	48x3½	52x4	½
59	381	4.5	240	40.0	85-2200	L	G	C	7-2⅝	12⅜	FP	Ow	Zen	P	DR	DR	P.Ow	Ow	Own	Own FN	Ros	O4FXM	450	D	FM	126	84	34	48x3	48x3	½
60	462	4.5	300	46.0	110-1900	L	G	C	7-3	13⅞	FP	Ow	Zen	P	DR	DR	P.Ow	Ow	Own	Own FM	Ros	O4FXM	450	D	FM	126	84	34	48x4	48x4	½
61	517	4.5	330	51.0	110-1900	L	G	C	7-3	13⅞	PC	Ow	Zen	V	Sc	DR	P.Ow	Ow	Own	Own F	Ros	O4FXM	600	D	FX	114	84	36	52x4	52x4	½
62	517	4.5	330	51.0	110-1900	A	C	C	7-3	13⅞	PC	Ow	Zen	V	Sc	DR	P.Ow	Ow	Own	Own F	Ros	O4FXM	600	D	FX	126	96	36	52x4	52x4	½
63	677	4.5	440	60.0	130-1900	L	G	C	7-3½	10⅜	PC	Ow	Zen	P	Sc	DR	P.Ow	Ow	Own	Own F	Ros	O4FXM	600	D	FX	126	96	36	52x4	52x4	½
64	677	4.5	440	60.0	130-1900	L	G	C	7-3½	10⅜	PC	Ow	Zen	P	Sc	DR	P.Ow	Ow	Own	Own F	Ros	O4FXM	600	D	FX	126	96	36	52x4	52x5	½
65	360	4.5	240	40.8	90-2500	H	G	N	7-2⅝	13	CC	KP	Zen	M	AL	AL	P. Li	GO	Spi	Shu 15692B12	Ros	L6IHV	708	G	CD	210	125	34¼	40x2½	52x4	N
66	360	4.4	240	40.8	90-2500	L	C	C	7-2⅝	11 11/16	FP	Op	Zen	M	DR	DR	P.Li	Pe	Spi	Wis F75AB	Ros	L6IH	459	a	TD	Opt	Opt	34	40x2½	46x3	N
67	420	5.2	300	44.4	130-2800	L	G	A	5-2¾	12¾	FP	Ly	Zen	M	DR	DR	P.Li	Pe	Spi	Wis F75AB	Ros	Ws6IA	459	a	TD	Opt	Opt	34	40x2½	46x3	N
68	428	4.6	276	40.0	106-2600	H	C	C	7-2¾	13	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000tw	Ros	Ws6IA	459	a	TD	Opt	Opt	34	40x2½	50x4	½
69	428	4.6	276	45.9	118-2600	H	C	C	7-2¾	13	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35000tw	Ros	Ws6IA	525	a	TD	Opt	Opt	34	46x3	56x4	½
70	500	4.5	340	48.6	138-2500	H	C	A	7-2¾	13 1/16	FP	No	Zen	M	DR	DR	P.Li	Pe	Spi	Wis F211W	Ros	Ws6IA	525	a	TD	Opt	Opt	34	46x3	56½x4	½
71	428	4.5	276	45.9	118-2600	H	C	C	7-2¾	13	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 27450W	Ros	Ws6IA	536	a	TD	Opt	Opt	34	46x3	66x4	½
72	707	4.5	460	60.0	150-2000	L	G	A	7-3½	17	FP	Op	Str	M	DR	DR	dp.BL	Pe	Spi	Wis F311W	Ros	Ws6IA	536	a	TD	Opt	Opt	34	46x3	66x4	½
73	611	4.5	384	54.1	127-2300	L	G	A	7-3¼	13 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 27450W	Ros	Ws6IA	720	a	TD	Opt	Opt	34	46x3	66x4	½
74	779	4.5	508	66.2	164-2000	L	G	A	7-3½	17	FP	Op	Str	M	DR	DR	dp.BL	Pe	Spi	Wis F311W	Ros	Ws6IA	720	a	TD	Opt	Opt	34	46x3	66x4	½
75	263	4.4	164	31.5	68-2800	L	G	C	7-2½	10 11/16	PC	No	Zen	M	DR	DR	P.BB	GO	Spi	Tim 30000H	Ros	L6IH	422	a	XF	180	111	33½	40x2½	46x3	N
76	529	4.4	350	51.3	114-2200	L	G	A	7-3	10 11/16	PC	No	Zen	M	DR	DR	P.BB	Pe	Spi	Tim 26450H	Ros	L6IH	842	a	DF	213	120	33	46x3	64x4	N
77	529	4.4	350	51.3	114-2200	L	G	A	7-3	12½	PC	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 26450W	Ros	Ws6IA	1014	a	DF	213	120	33	46x3	64x5	N
78	529	4.4	350	51.3	114-2200	L	G	A	7-3	12½	PC	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 26450W	Ros	Ws6IA	1014	a	DF	213	120	33	45x3	64x5	N
79	428	4.4	280	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Zen	M	AL	AL	D.Co	GO	SpP	Shu 5582B	Ros	L6IHV	571	a	TD	162	100	33	45¼x2½	58x4	N
80	501	4.4	330	48.6	111-2200	L	G	C	7-3	12½	PC	Ha	Zen	M	AL	AL	D.Co	GO	SpB	Shu 678	Ros	Ws4IA	238	a	TD	162	100¼	37	46x3	50x4	N
81	529	4.4	350	51.3	114-2200	L	G	C	7-3	12½	PC	Ha	Zen	M	AL	AL	D.Co	GO	SpB	Shu 678	Ros	Ws4IA	238	a	TD	138¾	94¾	37	46x3	50x4	N
82	707	...	455	60.0	148-2000	L	G	C	7-3½	17	PC	Ha	Zen	M	LN	LN	D.BL	GO	SpB	Shu 678	Ros	Ws4IA	238	a	TD	141	93	37	46x3	50x4	N
83	211	5.3	130	25.3	60-3100	L	C	S	4-2¼	6¼	CC	No	Car	M	DR	DR	P.BB	Fe	Own	Own	Own	O6IHV	273	a	TX	117½	50½	34½	36x1¾	43⅜x3	N
84	309	4.7	198	21.0	96-3000	L	G	S	7-2⅝	11¾	CC	Ha	Det	M	DR	DR	P.BB	Fe	Own	Own	Jac	O6IHV	657	a	CD	218 3/16	114 11/32	34⅜	42x3	56¼x4	N
85	462	5.2	324	46.0	125-2600	F	G	A	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 26450N	Ros	Ws4rIA	504	H	FD	168	114⅝	33½	41x3	46x3½	N
86	462	5.2	324	46.0	125-2600	F	G	A	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 26450N	Ros	Ws4rIA	504	H	FD	168	114⅝	33½	41x3	46x3½	N
87	677	4.4	440	60.	125-1800	L	G	A	4-3½	11⅜	CC	No	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 27050N	Ros	Ws4rIA	630	H	FD	214¼	144⅞	33½	42½x3	49½x4	N
88	677	4.4	440	60.0	125-1800	L	G	A	4-3½	11⅜	CC	No	Zen	M	DR	DR	P.BL	Pe	Blo	Tim 27050N	Ros	Ws4rIA	630	H	FD	214¼	144⅞	33½	42½x3	46x3½	N
89	263	5.4	164	31.5	67-2600	L	G	A	7-2½	10 11/16	PC	Mo	Car	M	DR	DR	P.BB	Lo	Spi	Tim 31020H	Ge	L6IH	384	a	TX	143	86½	34	38x2½	45x3	N
90	263	5.4	164	31.5	67-2600	L	G	A	7-2½	10 11/16	PC	Mo	Car	M	DR	DR	P BB	Lo	Spi	Tim 31020H	Ge	L6IH	384	a	TX	143	86½	34	38x2½	45x3	N
91	381	4.8	240	40.8	85-2400	L	G	A	7-2⅝	12½	FP	Wa	Zen	M	DR	DR	P.BB	Lo	Spi	Cla F320	Ros	L6IHV	485	a	FD	168	99½	34	42x2½	44x3	N
92	381	4.8	240	40.8	85-2400	L	G	A	7-2⅝	12½	FP	Wa	Zen	M	DR	DR	P.BB	Lo	Spi	Cla F320	Ros	L6IHV	485	a	FD	168	99½	34	42x2½	44x3	N
93	381	4.2	237	40.8	85-2200	H	C	C	7-2¾	13 1/16	CC	Mo	Zen	M	DR	DR	P.BB	Lo	Spi	Own 7738	Ros	L6IHV	623	a	TD	182	102	34	42x2½	50x3½	N
94	677	5.2	460	60.0	125-2000	L	G	H	4-3½	11⅜	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Wis 131F	Ros	B6IMV	504	G	T4	220	145	34	48x3½	40x5	N
95	517	4.5	330	51.3	110-2400	L	G	C	7-3	13⅞	PC	Wa	Zen	M	NE	NE	D.BL	Pe	Blo	Own M	Ros	B6IA	864	G	4I	180	137	36	42¾x2½	44x3	N
96	525	4.5	380	48.6	128-2100	H	C	A	7-2¾	14 11/32	FP	Ha	Str	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B6IA	817	a	TX	161	100	34 3/16	50x3½	45x4	N
97	616	4.5	450	57.0	149-3100	H	C	A	7-2¾	14 11/32	FP	Ha	St	M	DR	DR	dp.Ow	Lo	Spi	Own	Jac	B6IA	965	a	TX	161	100	34 3/16	50x3½	45x4	N
98	255	4.6	182	27.3	90-3200	F	G	C	4-2⅝	6 11/16	PC	Wa	Zen	M	DR	DR	D.Fu	Ch	MM	Tim 33000H	Ros	L4IHV	295	p	TD	Opt	Opt	34	40⅛x3½	31x3	N
99	358	4.6	254	38.4	110-2800	F	G	C	7-2⅝	12½	PC	Wa	Zen	M	DR	DR	D.Fu	Ch	MM	Tim 33000H	Ros	L4IHV	295	p	TD	Opt	Opt	34	40⅛x3½	31x3	N
100	358	4.6	254	38.4	110-2800	F	G	C	7-2⅝	12½	PC	Wa	Zen	M	DR	DR	D.Fu	Ch	MM	Tim 35000H	Ros	L4IHV	504	G	TD	Opt	Opt	34	40⅛x3½	35½x4	N
101	462	4.6	324	45.9	125-2600	F	G	C	7-3	13⅞	PC	Wa	Zen	M	DR	DR	D.Fu	Ch	MM	Tim 27450	Ros	L4IHV	504	G	TD	Opt	Opt	34	43x3½	35½x4	N
102	462	4.6	324	45.9	125-2600	F	G	C	7-3	13⅞	PC	Wa	Zen	M	DR	DR	D.Fu	Ch	Blo	Tim 27450	Ros	Ws4IA	780	G	TD	Opt	Opt	34	43x3½	35½x4	N
103	677	4.6	440	60.0	126-1850	L	G	C	4-3½	10 7/16	PC	Wa	Zen	M	DR	DR	D.BL	Ch	Blo	Tim 27450	Ros	Ws4IA	788	G	TD	Opt	Opt	34	43x3½	35½x4	N
104	638	4.3	410	54.1	126-1850	L	G	C	4-3	10 1/16	PC	Pe	Zen	M	RB	No	dp.BL	Yo	Blo	Shu 715-11	Ros	Ws4rIA	720	G	TD	139	88¼	38⅛	41⅞x3	53x4	N
105	282	5.3	186	33.7	73-2800	L	G	A	7-2½	10 11/16	PC	No	Str	M	AL	AL	P.BL	Yo	Spi	Tim 31020	Ros	L6IHV	559	G	TX	140	83	34	37x2¼	52x4	N
106	282	5.3	186	33.7	73-2800	L	G	A	7-2½	10 11/16	PC	No	Str	M	AL	AL	P.BL	Yo	Spi	Tim 31020	Ros	L6IHV	459	G	TX	140	83	34	37x2¼	44x3	N
107	339	4.7	210	38.4	76-2400	L	G	A	7-2⅝	13¼	PC	Op	Str	M	AL	AL	P.BL	Yo	Spi	Shu 5572	Ros	L41HV	559	G	CD	168	101	34⅛	39½x2½	52x4	N
108	428	4.4	283	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 5582B	Ros	L6IHV	625	G	CD	168	101	34⅛	40x2½	52x4	N
109	428	4.4	283	45.9	94-2200	L	G	A	7-3	14	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Shu 5582B	Ros	L6'HV	625	G	CD	168	101	34⅛	40x2½	52x4	N
110	501	5.0	330	48.6	110-2200	L	G	A	7-3	12½	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Wis	Ros	L6IHV	...	G	CD	142	87¼	34	39½x2½	54x3	N
111	529	4.9	350	51.3	115-2200	L	G	A	7-3	12½	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Wis	Ros	L6IHV	...	G	CD	142	87¼	34	44x3	52x4	N
112	779	4.5	505	66.2	163-2000	L	G	A	7-3½	17½	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Wis	Ros	Ws6IA	...	G	CD	144	88	34	44x3	42x4	N
113	855	4.5	555	72.8	180-2000	L	G	A	7-3½	17½	PC	Ha	Str	M	AL	AL	P.BL	Yo	Spi	Wis	Ros	Ws6IA	...	G	CD	168	100	34	44x3	42x4	N

Line Number	Make and Model	Wheels Driven—6-Wheelers	GENERAL See Keynoter: Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight	Chassis Wt. Stripped	TIRE SIZE: Front	Rear	MAJOR UNITS — ENGINE: Make and Model	No. of Cylinders Bore and Stroke	TRANSMISSION: Make and Model	Location and Forward Speeds	Aux. Location and Speeds	REAR AXLE: Make and Model	Gear and Type	Drive and Torque	GEAR RATIOS: In High	In Low	FRAME: Side Rail Dimensions	Type
1	Ken.....89SBT	2C	7	2380	188	224	25500	7350	P32x6	DP32x6	Her JXC	6-3¾x4¼	BL 234	U 4	Op	Tim SBT151	SF	A	7.4	45.5	8x3x¼	TL
2	.....127SBT	2C	8	3450	188	224	26000	8000	B8.25/20	DB8.25/20	Her WXC2	6-4⅛x4½	BL 334	U 4	Op	Tim SBT151	SF	A	7.4	45.5	8x3x¼	TL
3	.....146SBT	2C	9	4250	188	224	33000	9000	B9.00/20	DB9.00/20	Bud K393	6-4 3/16x4¾	BL 334	U 4	Op	Tim SBT251	SF	A	7.8	48.	8x3x¼	TL
4	.....186SDT	2C	10	6450	205	235	38000	10500	B9.00/20	DB9.00/20	Her YXC2	6-4½x4¾	BL 1554	U 4	A 3	Tim Sdt310w	2F	H	7.33	104.	9x3x¼	T
5	.....241SDT	2C	10	6850	205	235	40500	11000	B9.00/20	DB9.00/20	Her RXB	6-4½x5¼	BL 714	U 4	A 3	Tim Sdt310w	2F	H	7.33	85.5	9x3x¼	T
6	........D-346	4R	10	10250	210	240	40500	14300	B9.75/20	DB9.75/20	Cum HA6	6-4⅞x6	BL 714	U 4	A 3	Tim SW320W	WF	H	6.8	92.	8x3x3/16	C
7	........346A	4R	10	8800	210	240	40500	13000	B9.75/20	DB9.75/20	HaS 160	6-4¼x5½	BL 714	U 4	A 3	Tim SW310w	WF	H	7.25	84.5	8x3x3/16	C
8	........346B	4R	10	8550	210	240	40500	13000	B9.75/20	DB9.75/20	Bud GF-6	6-4¾x6	BL 714	U 4	A 3	Tim SW310w	WF	H	7.25	98.4	8x3x3/16	C
9	........346C	4R	10	9500	210	240	40500	14000	B9.75/20	DB9.75/20	HaS 175	6-5x6	BL 714	U 4	A 3	Tim SW310w	WF	H	7.25	98.4	8x3x3/16	C
10	........386C	4R	10	10200	210	240	50100	14500	B9.75/20	DB9.75/20	HaS 175	6-5x6	BL 714	U 4	A 3	Tim SW410w	WF	H	7.60	103.	8x3x3/16	C
11	Kleiber.... 81		5	1900	180	190	20000	6500	P32x6	DP32x6	Her JXB	6-3⅝x4¼	BL 2241	U 4	No	Tim SBT 75	BF	R	5.14	32.	7½x3¼x¼	C
12	121		7	2800	190	200	26000	8500	B8.25/20	DB8.25/20	Con 18R	6-4x4½	BL 3241	U 4	No	Tim SBT 151	BF	R	6.17	33.4	7½x3¼x¼	C
13	141		9	3950	200	210	33000	9500	B9.00/20	DB9.00/20	Con 21R	6-4⅜x4¾	BL 5241	U 4	No	Tim SBT251	BF	R	6.84	41.	7½x3¼x¼	C
14	La Fran-R..Q6	4R	9-12	11605	216	260	40000	14900	B10.50/20	DB10.50/20	Own 312B	12-4x5	BL 714	U 4	No	Tim SWD410	WF	..	Opt	Opt	12x3½x¼	L
15	Le Moon (9) 701	4R	5-6	4475	187	199	....	8500	B8.25/20	DB8.25/20	Lyc AEC	8-3¾x4¾	Fu VUOG	U 5	No	T' 63703-97H	WF	R	6.20	43.8	7x4x¼	B
16	.......(9) 801	4R	6-7	5100	187	199	....	9720	B9.00/20	DB9.00/20	Lyc AEC	8-3¾x4¾	Fu VUOG	U 5	No	Ti 65703-97H	WF	H	6.75	47.7	7x4x¼	B
17	802	4R	6-7	5350	187	199	....	9800	B9.00/20	DB9.00/20	Wau 6SRL	6-4⅜x5⅛	Fu VUOG	U 5	No	T65703-97tW	WF	H	6.75	47.1	7x4x¼	B
18	900	4R	7-8	6775	191	203	....	12000	B9.75/20	DB9.75/20	Wau 6SRL	6-4⅜x5⅛	BL 607	A 7	No	TimSW310W	WF	H	9.25	86.9	9x4x3/16	B
19	1000	4R	8-10	7950	196	208	....	12600	B9.75/24	DB9.75/24	Wau 6AB	6-4½x5¾	BL 714	U 4	3	TimSW310W	WF	H	9.25	128.	9x4x3/16	B
20	1200	4R	10-12	8500	196	208	....	14000	B9.75/24	DB9.75/24	Wau 6RB	6-5x5¾	BL 714	U 4	3	TimSW410W	WF	H	9.25	128.	9x4x3/16	B
21	......1200D	4R	10-12	9750	196	208	....	14000	B9.75/24	DB9.75/24	Cum.Die.H6	6-4⅞x6	BL 735	U 5	No	TimSW410W	WF	H	7.6	47.6	9x4x3/16	B
22	Mack......BX	4R	8-15	7950	178	207	....	12000	B8.25/22	DB8.25/22	Own CF	6-4¼x5½	Own BX	U 4	No	Own BX6	2F	A	6.53	46.0	9½x3x¼	C
23	..........BQ	4R	8-15	9350	224	248	....	15000	B9.75/22	DB9.75/22	Own BQ	6-4¾x5¾	Own AC	A 4	No	Own BX6	2F	A	6.54	41.9	10½x3x¼	C
24	..........AC	4R	8-15	8500	217	257	....	14550	P40x8	DP40x8	Own BQ	6-4¾x5¾	Own AC	J 4	No	Own AC	CD	R	9.26	59.4	8⅝x3x3/16	C
25	..........AK	4R	8-15	9000	217	257	....	15900	B9.75/22	DB9.75/22	Own BQ	6-4¾x5¾	Own AC	A 4	No	Own AK6	2F	A	7.46	47.8	8⅝x3x3/16	C
26	..........AP	4R	8-15	10500	217	257	....	14850	P40x8	DP40x8	Own AP	6-5x6	Own AC	J 4	No	Own AC	CD	R	9.26	59.4	8x3x3/16	C
27	..........AP	4R	8-15	11000	217	257	....	16400	B9.75/22	DB9.75/22	Own AP	6-5x6	Own AC	A 4	No	Own AK6	2F	A	7.46	47.8	8⅝x3x3/16	C
28	Mar.-Her.TH310A-6		10	10000	193	229	....	14070	B9.75/22	DB9.75/22	Her RXC	6-4⅝x5¼	Fu 5A530	U 5	A 2	Own-Wis	2F	R	9.11	163.	8⅛x3x3/16	P
29	..(13)TH315	6	12-13	12500	198	234	....	15420	B9.75/22	DB9.75/22	Her HXB	6-5x6	BL 724	U 4	A 3	Own-Wis	2F	R	9.11	163.	8⅛x3x3/16	P
30	..(13)TH320	6	15-18	14500	225	255	....	18450	B10.50/24	DB10.50/24	Her HXC	6-5¼x6	BL 724	U 4	A 3	Own-Wis	2F	R	9.11	188.	10x3x⅜	P
31	Moreland R.A15	2C	3	1550	153	Op	15000	5300	B6.50/20	DB6.50/20	Her JXC	6-3¾x4¼	BL 224	U 4	No	Tim SBT75	SF	R	5.66	35.0	7 1/16x2⅝x¼	T
32	........RA20	2C	5	1981	149	Op	20000	6100	P32x6	DP32x6	Her JXC	6-3¾x4¼	BL 224	U 4	No	Tim SBT151	SF	R	6.17	38.2	7 1/16x2⅝x¼	T
33	.....BD21M	4C	5	3534	184	Op	21000	8300	B7.50/20	DB7.50/20	Her WXC3	6-4¼x4½	BL 334	U 4	No	Tim 64800	WF	R	6.40	39.6	9 3/16x3½x3/16	T
34	.....ED25M	4C	7	4067	184	Op	25000	8900	B8.25/20	DB8.25/20	Her WXC3	6-4¼x4	BL 334	U 4	No	Tim 65000	W	R	7.50	46.0	9 3/16x3½x3/16	T
35	.....HD34M	4C	10	5869	220	Op	34000	11000	B9.00/20	DB9.00/20	Her RXB	6-4½x5¼	BL 524	U 4	No	Tim 65720	W	R	8.50	62.0	9⅛x3 3/16x9/32	T
36	.......TD34	4C	10	7607	221	Op	34000	13250	B9.75/20	DB9.75/20	Con 16H	6-4¾x5¾	BL 724	U 4	No	Tim 68720W	W	R	8.75	62.0	11x3 3/16x3/16	T
37	Sterling FBT152	2R	8½	4580	174	204	30400	9500	B9.00/20	DB9.00/20	Wau 6-110	6-4x4¾	Own UC7	U 5	No	Own	BF	R	7.8	55.5	10x3¼x¼	L
38	.....FDT152	2R	8½	4705	174	204	30400	9700	B9.00/20	DB9.00/20	Wau 6-110	6-4x4¾	Own UC7	U 5	No	Own	2F	R	9.0	52.7	10x3¼x¼	L
39	.....FDS180	4R	8-10	8605	158	Op	36000	12850	P40x8	DP40x8	Wau AB	6-4½x5¾	Own UC8	U 4	A 3	Tim 310	2F	R	9.1	113.	15x3¼x¼	L
40	.....FDS200	4R	10-12	9130	159	Op	40000	13550	P40x8	DP40x8	Wau RB	6-5x5¾	Own UC8	U 4	A 3	Tim 410	2F	R	9.1	113.	15x3¼x¼	L
41	*.....FCS210	4R	15-18	10175	Op	Op	42000	14750	P40x8	DP40x8	Wau RB	6-5x5¾	Own UC8	U 4	A 3	Own	CD	R	9.5	59.6	15x3¼x¼	L
42	.....FDT200	2R	12-12½	7670	178	208	40000	12050	P40x8	DP40x8	Wau 6-125	6-4⅜x5⅛	Own UC	U 4	Op	Own	2F	R	8.85	58.8	12x3¼x¼	L
43	.....FDT250	2R	16-16½	8855	186	216	50000	13550	P42x9	DP42x9	Wau RB	6-5x5¾	Own UC8	U 4	Op	Own	2F	R	8.85	55.5	15x3¼x¼	L
44	.....FCT180	2R	10-10½	7265	178	208	36000	11200	P36x8	DP36x8	Wau SRL	6-4⅜x5⅛	Own UC	U 4	Op	Own	CD	R	8.2	54.5	12x3¼x¼	L
45	.....FCT200	2R	12-12½	7685	178	208	40000	11800	P40x8	DP40x8	Wau 6-125	6-4⅜x5⅛	Own UC	U 4	Op	Own	CD	R	9.3	61.8	12x3¼x¼	L
46	Ward 440TC		15	11000	240	246	44000	14000	B9.75/22	DB9.75/22	Cu. Die. HA	6-4⅞x6	BL 735	A 5	No	Tim SDT420w	WF	R	6.42	40.4	14x3¼x¼	T
47	LaFr. 440TR		15	9350	240	246	44000	13700	B9.75/22	DB9.75/22	Wau RB	6-5x5¾	BL 735	A 5	No	Tim SDT420w	WF	R	6.42	40.4	14x3¼x¼	T
48	340TM		7½	4700	204	230	28000	9200	B8.25/20	DB8.25/20	Wau MK	6-4⅛x4¾	BL 5352	U 5	No	Tim SBT251H	SF	T	Opt	Opt	12x3¼x¼	T
49	......400T5		12	7100	203	241	40000	13000	B9.75/20	DB9.75/20	Wau 6-125	6-4⅜x5⅛	BL 5352	U 5	No	Tim SWT320tw	WF	R	8.5	65.5	14x3¼x¼	T
50	Wht. 630SW251	4R	5-6	* * *	193	205	....	10000	B8.25/20	DB8.25/20	Own A7	6-4 3/16x5¼	Own 4B	U 4	No	Tim SW251	WF	R	6.75	44.2	8⅛x3 3/16x3/16	C
51	...642SW320	4R	7-9	* * *	198	210	....	12670	B9.00/20	DB9.00/20	Own 1AB	6-4⅜x5¾	Own 7B	U 4	No	TimSW310W	WF	R	8.5	55.6	8⅛x3 3/16x3/16	C
52	..643SW420	4R	9-11	* * *	198	215	....	14400	P40x8	DP40x8	Own 1AB	6-4⅜x5¾	Own 7B	U 4	No	TimSW410W	WF	R	10.2	69.1	8⅛x3 3/16x⅝	C

Hercules Develops Two Small Fours for Commercial Use



The small fours added to the Hercules line are designed to furnish 37 and 40-ft. lbs. torque

HERCULES Motors Corp. of Canton, Ohio, has added the following fours to its present line of heavy duty four- and six-cylinder engines:

Model ZXA, 2½ in. bore, 3 in. stroke, 58.8 displacement; Model ZXB, 2⅝in. bore, 3 in. stroke, 64.9 displacement.

These two L-head models are identical in general design and the majority of the parts are interchangeable; the only difference being in the bore sizes and the parts affected thereby. The maximum torque of the ZXA is 37 lbs. developed at from 1500 to 2400 r.p.m. and on the ZXB is 40 lbs. developed from 1500 to 2400 r.p.m. Both models peak at 4000 r.p.m., the ZXA developing 22 h.p., the ZXB 24½ h. p. at this speed.

To meet present operating conditions calling for sustained high speed, special consideration has been given to valve cooling. Standard practice includes thermo-syphon cooling, but water pumps are available if specified. Either down-draft or up-draft manifolds are optional.

Lubrication is of the full force feed type to the main bearings and connecting rod bearings. The pump is located beneath the center main bearing and driven from the camshaft by spiral gears.

The crankcase is cast integral with the block. The crankshaft is 2 inches in diameter at the three main bearings. The connecting rod bearings are 1½ inches in diameter and 1 inch long.

The pistons normally are of cast iron and carry three rings above the pin. Each pin is securely locked in its connecting rod by a clamp bolt. Aluminum pistons can be supplied. There are

Line Number	Piston Displacement	Compression Ratio	Torque lb. ft.	N.A.C.C. Rated H.P.	Max. Brake H.P. at R.P.M. Given	Valve Arrangement	Camshaft Drive	Piston Material	Main Bearings: Number and Diameter	Main Bearings: Length	Oiling System Type	Governor Make	Fuel Syst.: Carburetors Make	Fuel Syst.: Fuel Feed	Electrical: Ignition System Make	Electrical: Generator, Starter Make	Clutch Type and Make	Radiator Make	Universals Make	Front Axle: Make and Model	Steering Gear Make	Brakes: Service: Make, Location Type, Operation	Brakes: Service: Lining Area	Brakes: Service: Drum Material	Brakes: Hand Location, Type	Body Mounting Data: Cab to Rear of Frame	Body Mounting Data: Cab to Rear Axle	Body Mounting Data: Width of Frame	Springs: Front	Springs: Rear	Springs: Auxiliary Type
1	282	4.7	176	33.7	73-2700	L	G	A	7-2½	10 11/16	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 31000H	Ros	L6IHV	536	a	TX	168	102	31½	38x2¼	52x4	N
2	361	4.4	235	40.8	83-2400	L	G	A	7-2⅝	13¼	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L6IHV	536	a	FD	168	102	31½	38x2½	52x4	N
3	393	4.9	260	42.1	103-2600	L	G	C	7-3	11½	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 33000H	Ros	L6IHV	654	a	FD	168	102	31½	38x2½	52x4	N
4	453	4.7	300	48.6	98-2200	L	G	A	7-3	14	CC	Ha	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35000N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
5	501	4.9	330	8.6	110-2200	L	G	A	7-3	12½	CC	Ha	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
6	672	...	420	57.	125-1800	H	G	C	7-3¼	13⅜	FP	Cu	No	C	No	LN	P.BL	Pe	Spi	Tim 36020N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
7	468	4.4	322	3.3	125-2400	H	C	A	4-2¾	10⅜	FP	No	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
8	638	4.3	410	54.1	126-1850	L	G	C	4-3	10 1/16	CC	Bu	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
9	707	4.4	506	60.0	170-2000	H	C	A	7-3¼	11 1/16	FP	HS	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
10	707	4.4	506	60.0	170-2000	H	C	A	7-3¼	11 1/16	FP	HS	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 36020N	Ros	Ws4rA	815	a	FD	192	120	33¾	42x3	56x4	½
11	263	5.4	164	31.5	70-3000	L	G	C	7-2½	10 11/16	PC	No	Str	M	DR	DR	P.BL	Ow	Spi	Tim 30000H	Ros	L6IHV	412	G	TD	168	104	34	38x2½	47x3	N
12	339	4.2	212	38.4	90-2700	H	C	C	7-2¾	13 1/16	PC	No	Str	M	DR	DR	D.BL	Ow	Spi	Tim 33020H	Ros	L6IHV	559	G	TD	170	108	34	38x2½	56x4	N
13	427	4.2	270	45.9	118-2500	H	C	C	7-2¾	13 1/16	PC	No	Str	M	DR	DR	D.BL	Ow	Spi	Tim 33020H	Ros	L6IHV	654	G	TD	180	118	34	38x2½	56x4	N
14	754	5.1	510	76.7	240-2900	H	C	C	4-3½	10	PC	No	Zen	M	DR	DR	dp. Lo	Ow	Blo	Tim 27450tw	Ros	Ws6IA	782	Da	CD	111⅝	216	34	44x3	None	N
15	420	5.2	300	44.4	130-2800	L	G	C	5-2¾	12¾	FP	Ha	Str	M	DR	DR	D.Fu	Ch	Spi	Tim 35000H	Ros	L6IHV	525	a	CD	162	108	34	39x2½	39x2½	N
16	420	5.2	300	44.4	130-2800	L	G	C	5-2¾	12¾	FP	Ha	Str	M	DR	DR	D.Fu	Ch	Spi	Tim 35000H	Ros	L6IHV	633	a	CD	162	108	34	39x2½	46x3½	N
17	462	4.5	300	45.9	98-2000	L	G	A	7-3	13⅞	PC	Wa	Str	M	My	DR	D.Fu	Ch	Spi	Tim 35000tw	Ros	Ws6IA	711	a	CD	162	108	34	39x2½	46x3½	N
18	462	4.5	300	45.9	98-2000	L	G	A	7-3	13⅞	PC	Wa	Str	M	My	DR	D.BL	Ch	Spi	Tim 26045tw	Ros	Ws6IA	966	a	CD	162	108	34	48x3½	53x4	N
19	549	4.5	332	48.6	100-2000	L	G	A	4-3½	11⅜	PC	Wa	Str	M	My	LN	D.BL	Ch	Spi	Tim 26045tw	Ros	Ws6IA	966	a	CD	162	108	34	48x3½	53x4	N
20	677	4.6	460	60.0	127-2000	L	G	A	4-3½	11¾	PC	Wa	Str	M	My	LN	D.BL	Ch	Spi	Tim 27045tw	Ros	Ws4IA	792	a	CD	162	108	34	48x3½	53x4	N
21	672	17.1	420	57.0	125-1800	H	G	C	7-3¼	16½	FP	Ow	No	P	No	LN	dp BL	Ch	Spi	Tim 27045tw	Ros	Ws6IA	966	a	CD	162	108	34	48x3½	53x4	N
22	468	5.2	310	43.4	117-2400	L	G	C	7-3	12 1/16	FP	Pe	Str	M	RB	NE	P.Ow	Ow	Spi	Own BX	Own	O6IA	974	a	FX	192	109	33¼	54¼x3	48x3½	N
23	611	5.7	398	54.2	128-2300	L	G	C	4-3½	10 1/16	FP	Ow	Str	M	RB	NE	P.Ow	Ow	Spi	Own BQ	Ros	O6IA	902	a	FX	192	111	33¼	50x3½	48x3½	N
24	611	5.7	398	54.2	128-2300	L	G	C	4-3½	10 1/16	FP	Ow	Str	M	RB	NE	P.Ow	Ow	Spi	Own AC	Ros	O6IA	930	a	FX	180	109	37⅝	48x3½	52x4	½
25	611	5.7	398	54.2	128-2300	L	G	C	4-3½	10 1/16	FP	Ow	Str	M	RB	NE	P.Ow	Ow	Spi	Own AK	Ros	O6IA	1044	a	FX	180	109	38⅛	48x3½	52x4	½
26	706	4.4	427	60.0	138-1900	L	G	C	4-3 1/16	11 11/16	PS	Ow	Str	M	RB	NE	P.Ow	Ow	Spi	Own AK	Ros	O6IA	930	a	FX	180	109	38⅛	48x3½	52x4	½
27	706	4.4	427	60.0	138-1900	L	G	C	4-3 1/16	11 11/16	PS	Ow	Str	M	RB	NE	P.Ow	Ow	Spi	Own AK	Ros	O6IA	1044	a	FX	180	109	38⅛	48x3½	52x4	½
28	529	4.9	350	51.3	114-2200	L	G	A	7-3	14	PC	Ha	Zen	M	DR	DR	D.Fu	Yo	Blo	Own-Wis	Ros	Ws4/6IA	760	a	FD	152	102	34	44x3	46x4	½
29	707	4.5	460	60.0	148-2000	L	G	A	7-3½	17	PC	Ha	Zen	M	DR	DR	dp.BL	Yo	Blo	Own-Wis	Ros	Ws4/6IA	760	a	FD	174	102	34	44x3	46x4	½
30	779	4.5	508	66.2	164-2000	L	G	A	7-3½	17	PC	Ha	Zen	M	DR	DR	dp.BL	Yo	Blo	Own-Wis	Ros	Ws4/6IA	760	a	2FD	223	127	34	52x4	46x4	½
31	282	5.C	176	33.8	73-2800	L	G	C	7-2½	10 11/16	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 30000H	Ros	L6IH	412	a	TD	168	71	34	40x2½	44x3	N
32	282	5.0	176	33.8	73-2800	L	G	C	7-2½	10 11/16	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 31000H	Ros	L6IH	570	a	TD	168	67	34	40x2½	52x4	N
33	383	4.4	262	43.3	92-2400	L	G	C	7-2⅝	13¼	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 33020H	Ros	L6IH	578	a	TD	192	101	34	40x2½	42x2½	½
34	383	4.4	262	43.3	92-2400	L	G	C	7-2⅝	13¼	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim 33020H	Ros	L6IH	661	a	TD	192	101	34	41½x2½	43½x3½	½
35	501	4.9	330	48.6	110-2200	L	G	C	7-3	12½	PC	No	Zen	M	AL	AL	P.BL	Lo	Cle	Tim26450TW	Ros	W6IA	898	a	TD	216	113	34	42x3	43½x4	½
36	611	4.5	384	54.1	127-2300	L	G	A	7-3	13 11/16	PC	No	Zen	M	AL	AL	dp.BL	Lo	Cle	Tim 27050W	Ros	W6IA	960	a	TD	Opt	Opt	38	44x3	48x3½	½
37	358	5.0	254	38.5	110-2800	F	G	A	7-2 11/16	12½	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 35000N	Ros	L4IHV	596	a	CX	192	91	34	42x2½	57x4	N
38	358	5.0	254	38.5	110-2800	F	G	A	7-2 11/16	12½	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 35000N	Ros	L4IHV	596	a	CX	192	91	34	42x2½	57x4	N
39	549	4.5	330	48.6	99-2000	L	G	C	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 26450N	Ros	Ws4IA	576	a	CX	Opt	88	34	48x3	58x4	N
40	677	4.4	440	60.0	125-2000	L	G	C	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 27450N	Ros	Ws4IA	792	a	CX	Opt	89	34	48x3	58x4	N
41	677	4.4	440	60.0	125-2000	L	G	A	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 27450N	Ros	Ws4IA	792	s	CD	Opt	Opt	34	48x3	60x3½	N
42	462	5.5	324	45.9	125-2400	F	G	A	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Ow	No	Spi	Tim 26450N	Ros	O4IA	792	a	CX	192	94	34	48x3	(10)	N
43	677	4.4	440	60.0	125-2000	L	G	A	4-3½	11⅜	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 27450N	Ros	O4IA	792	a	CX	192	93	34	48x3	(10)	N
44	462	4.5	300	45.9	102-2400	L	G	C	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 26450N	Ros	O4IA	1152	S	JX	192	94	34	48x3	(10)	N
45	462	5.5	324	45.9	125-2400	F	G	A	7-3	13⅞	CC	Ha	Zen	M	DR	DR	D.Ow	Mo	Spi	Tim 26450N	Ros	O4IA	1152	S	JX	192	94	34	48x3	(10)	N
46	672	17.0	420	57.0	125-1800	H	G	C	7-3¼	16½	CC	En	No	M	CI	LN	dp.BL	Pe	Spi	Tim 27452W	Ros	Ws6IA	1012	a	TD	255	148¼	34	42x3	46x4	N
47	677	5.5	465	60.0	145-2000	L	G	C	4-3½	11¼	FP	Wa	Zen	V	DR	LN	dp.BL	Pe	Spi	Tim 27452W	Ros	Ws6IA	1012	a	TD	255	148¼	34	42x3	46x4	N
48	381	4.6	242	40.8	85-2500	L	G	C	7-2⅝	12½	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim 35000H	Ros	L6IHV	651	a	TD	192	115	34	42x3	52x4	N
49	462	4.6	324	45.9	125-2600	F	G	A	7-3	13⅞	FP	Wa	Zen	M	DR	DR	P.BL	Pe	Spi	Tim26450TW	Ros	Ws6IA	902	a	TD	192	116¼	34	42x3	46x4	N
50	434	4.9	275	42.0	105-2100	H	C	S	7-2¾	13⅛	FP	Ow	Zen	M	DR	DR	P.Ow	Ow	Spi	Own 6D	Ros	L4rIHV	514	a	CI	194⅞	109⅞	34 1/16	42x3	51½x4	N
51	519	4.0	333	45.9	118-2100	H	C	S	7-3	15 11/16	FP	Ow	Zen	E	LN	LN	dp.Ow	Ow	Spi	Own 12D	Ros	Ws6IA	833	a	CI	194¾	109¾	34 1/16	42x3	42x4	N
52	519	4.0	333	45.9	118-2100	H	C	S	7-3	15 11/16	FP	Ow	Zen	E	LN	LN	dp.Ow	Ow	Spi	Own 12D	Ros	Ws6IA	833	a	CI	194¾	109¾	34 1/16	42x3	42x4	N

bronze bushings in the piston bosses.

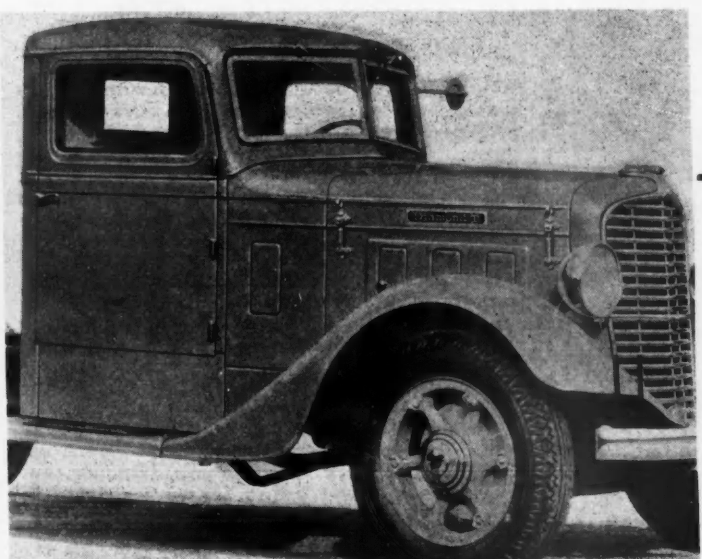
The camshaft is on the right hand side, supported by four bearings 1¼ inches in diameter.

The L-head cylinders have 30-deg. valve seats. Exhaust valves have a clear diameter of ⅞ in., intake valves of 1⅛ in. They are operated through mushroom-type tappets.

The overall dimensions of these engines are as follows: Length, 23 7/16 in.; height, 16¼ in.; width, 14¾ in. These are subject to slight variations due to the use of bellhousings, etc., other than standard.

The ZX series engines are for application where small engines are required in commercial vehicles.

Diamond T Has a De Luxe Cab to Match V-Type Radiator

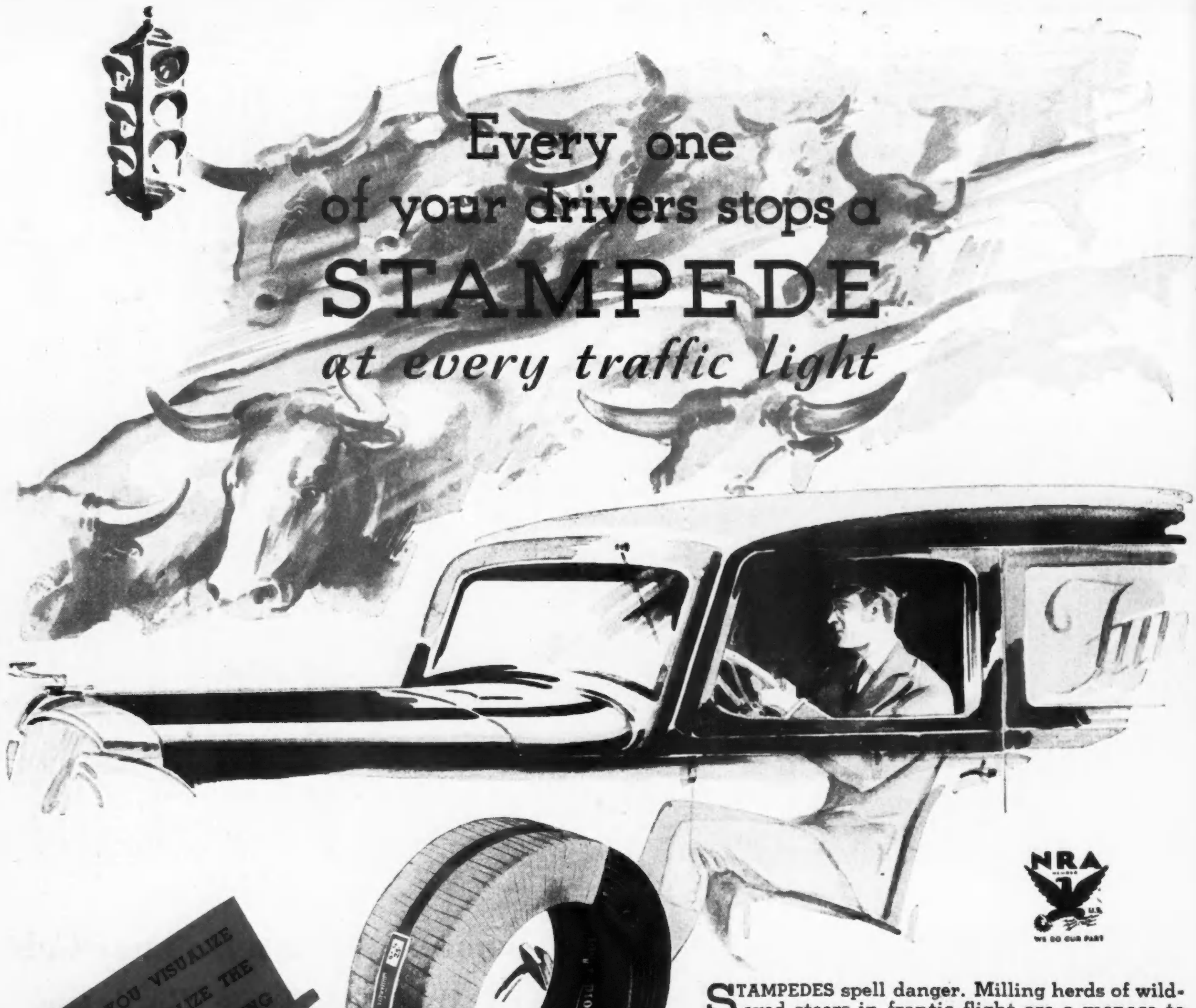


The new Diamond T de luxe cab has a double windshield with crank control ventilation for each

TWO new all-weather steel cabs, both smart in appearance and well designed for service, have been developed by Diamond T Motor Car Co. for its 211 models.

The standard cab is of the vestibule type with one piece clear vision windshield and windows crank controlled. Automatic windshield wiper and rear vision mirror are supplied with the cab.

The new Vee-type de luxe cab (illustrated) has been designed to harmonize with the distinctive radiator appearance and provides a double windshield with crank control ventilation for each. Seats are extra deep and comfortable and there are many interior refinements for convenience ad comfort, including arm rests, door pockets, adjustable sun visor and cigar lighter. This cab presents the latest development of modern streamline design with rounded corners and smooth surfaces to reduce wind resistance and avoid eddy currents.



Thermoid BRAKE LINING

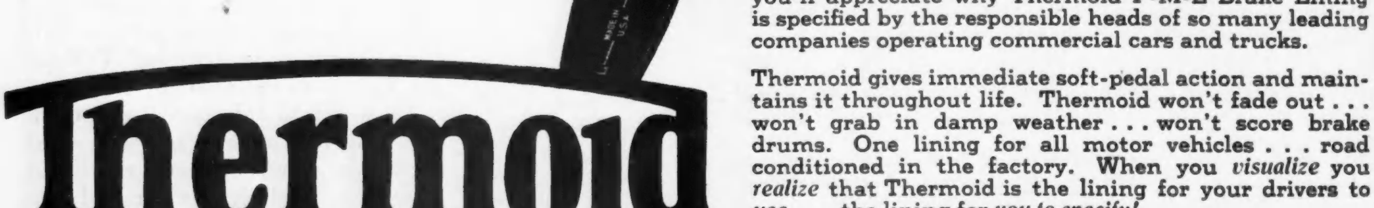
STAMPEDES spell danger. Milling herds of wild-eyed steers in frantic flight are a menace to life and property. Think of the powerful force, the speed, and the weight that each of your drivers *must* control by *pressure on the brake pedal.* And remember that one stampeding truck or delivery car can do as much damage as *many* stampeding steers.

When you translate the stopping of a car into terms of what such an accomplishment actually represents, you'll appreciate why Thermoid F-M-L Brake Lining is specified by the responsible heads of so many leading companies operating commercial cars and trucks.

Thermoid gives immediate soft-pedal action and maintains it throughout life. Thermoid won't fade out . . . won't grab in damp weather . . . won't score brake drums. One lining for all motor vehicles . . . road conditioned in the factory. When you *visualize* you *realize* that Thermoid is the lining for your drivers to *use* . . . the lining for *you to specify!*

THERMOID RUBBER COMPANY
Department C
Factories and Main Offices: TRENTON, NEW JERSEY

HEAVY DUTY BRAKE BLOCKS	HEAVY DUTY FAN BELTS	HEAVY DUTY CLUTCH FACINGS	HEAVY DUTY RADIATOR HOSE



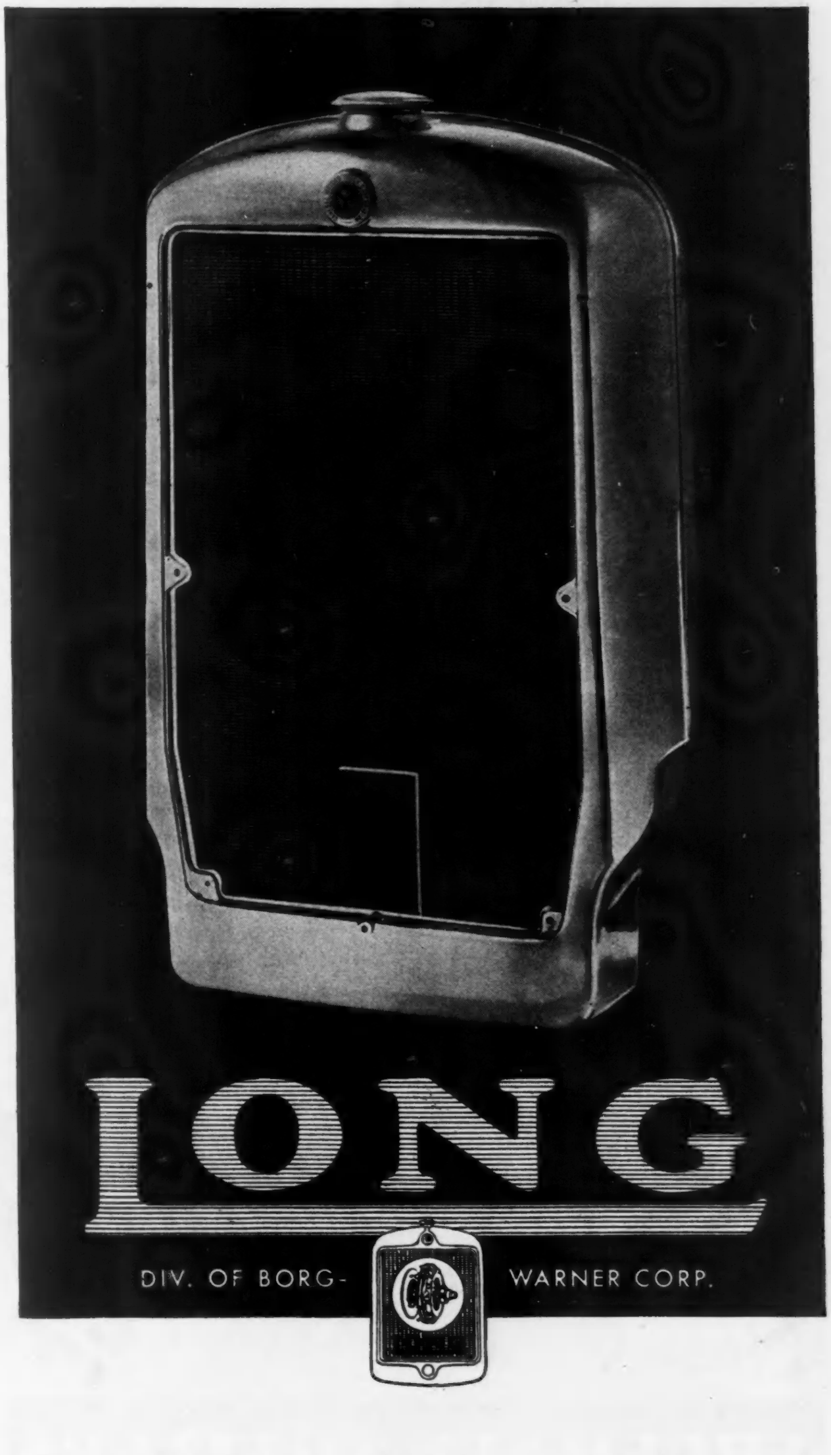
A RADIATOR FOR EVERY AUTOMOTIVE NEED

★

FOR over 30 years we have assisted a number of leading truck, bus and passenger car manufacturers in the development of new radiator designs, made necessary by radical changes in body styling. With the continuous fin and tube type radiator, we have been able to design a unit of equal, if not greater cooling capacity in a given maximum frontal area.

Long engineers determine cooling efficiency by every manner of engineering and service test to get the most effective heat transfer—and meet the demands for greater cooling efficiency.

★



LONG MANUFACTURING COMPANY, DETROIT, MICHIGAN

AUTOMOTIVE CLUTCHES · · RADIATORS · · GRILLES

Ford Bolsters Bid

(CONTINUED FROM PAGE 36)

tem which has proven so highly successful in giving improved fuel economy for the passenger car.

The truck engine also utilizes new cast-iron cylinder heads with which horsepower output is obtained equal to that of the former powerplant equipped with aluminum heads and single carburetor. The engine develops in excess of 80 hp., approximately 5 hp. more than formerly. A new combustion chamber shape for the cylinder heads gives a greater power output from a lower compression pressure. The compression ratio of the new iron heads is 5.32 to 1.

To assure long bearing life the connecting rod insert bearings are of a new high-load bronze, capable of withstanding high oil temperatures. The crankshaft is of the new cast alloy-steel.

Among other changes in the truck for 1934 are a new seat cushion with "mattress" type springs.

The front bumper has been lengthened and will be chrome-plated.

News

(CONTINUED FROM PAGE 38)

troit Axle Co. executive, has been named vice-president of the Thornton Tandem Co., President Richard F. Barnum reports. Mr. Gilbert joins Thornton in connection with the expansion of production and marketing of its dual-ratio positive four-wheel drive unit for trucks.

Raymond Selling Fruehaufs

G. W. Chamberlin, vice-president in charge of sales for the Fruehauf Trailer Co., announces appointment of Henry W. Raymond to the sales staff, with headquarter at the factory. Mr. Raymond formerly was general sales manager of the Lapeer Trailer Corp.

Evans and Strawbridge Join

Boyd V. Evans former chief engineer of Detroit Motor Bus Co., and W. L. Strawbridge, have organized the Transportation Materials Co., with offices at 1916 Fairmount Ave., Philadelphia, Pa., and specialize in a complete line of cleaners and equipment for the transportation field, including trucks.

Fisken and Timper Advance

E. W. Timper has been made manager of sales promotion for Chevrolet Motor Co., succeeding C. P. Fisken, now advertising manager.

Furlong Directs Sales

Donald G. Furlong has been appointed director of sales for the Thornton Tandem Co. Formerly Furlong was with the Ford Motor Co. in charge of commercial car and truck sales for the Dearborn branch. He is now inaugurating a distribution policy.

Henry With Gulf Fleet

James S. Henry, automotive engineer, is now with the Gulf Refining Co., in the Houston, Tex., office studying fleet operation. He was formerly with the Humble Oil & Refining Co., Houston.

Julian Deane Resigns

Julian (Larry) Deane, sales promotion manager of United American Bosch Corp., has resigned to become associated with McCann-Erickson, Inc., New York advertising agency.

Franklin F. Chandler

Franklin F. Chandler, 57, vice-president of the Ross Gear & Tool Company, died at his home in Lafayette, Ind., following a brief illness.

Henry Bert Edwards

Henry Bert Edwards, 75, died of pneumonia in Detroit. After serving as branch manager of the Studebaker truck division in Chicago and New York he returned to Detroit as wholesale manager.

John E. Peters

John E. Peters, 60, died in Detroit after a year's illness. For 20 years he had been salesman and then sales manager for Federal Motor Truck Co.